ORDER NO. GAD8507509C1
I2

Service Manual

Car Audio

RM-1300A
RM-1400A

(Black)

FM-AM-FM STEREO
CASSETTE DECK/TUNER/AMPLIFIER

CUSTOM-MADE FOR HONDA

DOLBY SYSTEM

This is the Service Manual for the following area.

M ···For U.S.A.

Spare parts for this model have already been unable to supply.
However,we un-offcially may supply a few items.
Please contact us regarding this matter.

■ SPECIFICATIONS

General

Power Source:	DC 12V (Negative ground only)
Test Voltage:	DC 14V
Power Consumption:	0.8A at maximum power output (Memory backup 0.5mA)
Dimensions:	208mm(W)×64mm(H)×144mm(D) ($8^{3}/_{16}$×$2^{9}/_{16}$×$5^{11}/_{16}$) without bracket
Weight:	1.7kg (3 lb $^{3}/_{4}$ oz) without bracket

FM Tuner Section

Frequency Range:	87.5~107.9MHz
Usable Sensitivity:	8dB (S/N 30dB)
Signal to Noise Ratio:	55dB
Stereo Separation:	35dB at 1kHz
THD:	0.5%
IF Frequency:	10.7MHz

AM Tuner Section

Frequency Range:	530~1620kHz
Usable Sensitivity:	34dB (S/N 20dB)
Selectivity:	50dB (±10kHz)
IF Frequency:	450kHz

Cassette Deck Section

Tape System:	Auto-reverse
Wow & Flutter:	0.15% (WRMS)
Stereo Separation:	35dB at 1kHz

Intercom Section

Mike Input Impedance:	600Ω
Headphone Output:	0.5W (16Ω/CH)

*"Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.
Noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation.
Weights and dimensions shown are approximate.
Design and specifications are subject to change without notice.

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LOCATION OF CONTROLS AND COMPONENTS

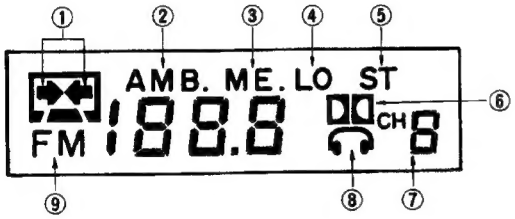


Fig. 1

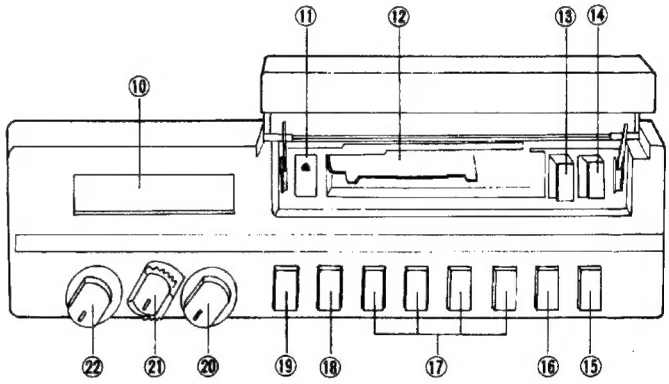


Fig. 2

① Direction Indicators
② Ambience Indicator
③ Metal/Memory Indicator
④ Local/DX Indicator
⑤ FM Stereo Indicator
⑥ Dolby Indicator
⑦ Preset CH Indicator
⑧ Headset Indicator
⑨ AM/FM Indicator
⑩ LCD Display
⑪ Eject Button
⑫ Tape Slot
⑬ Rewind Button
⑭ Fast Forward Button
⑮ Ambience Switch (ON/OFF)
⑯ Metal/Memory Switch (M/ME)
⑰ Preset Switches (CH1/PRO., CH2, CH3, CH4)
⑱ Sensitivity Switch, Dolby Switch (DX/LOCAL, DOLBY ON/OFF)
⑲ Band Switch (AM, FM)
⑳ Speaker/Headset Switch, Intercom Switch/Control Volume (PUSH SP/HS)
㉑ Mute Level Control (MUTE LEVEL)
㉒ Radio/Tape Switch, Power Switch, Volume Control (PUSH RADIO/TAPE, POWER OFF)

DISASSEMBLY INSTRUCTIONS

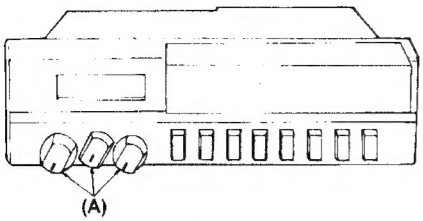


Fig. 1

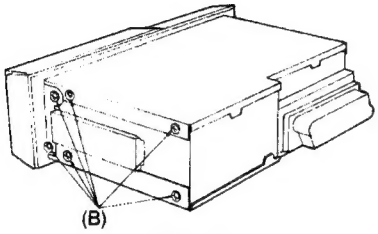


Fig. 2

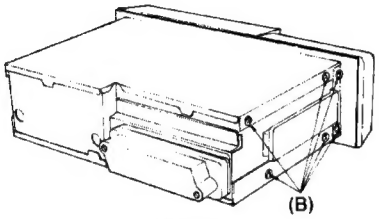


Fig. 3

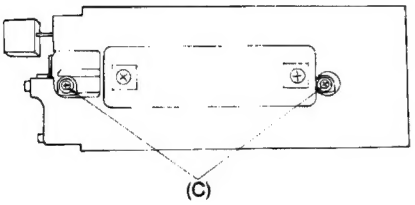


Fig. 4

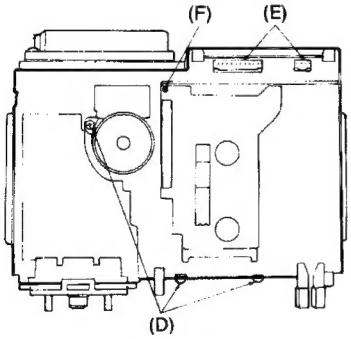


Fig. 5

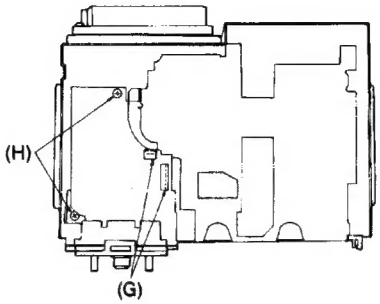


Fig. 6

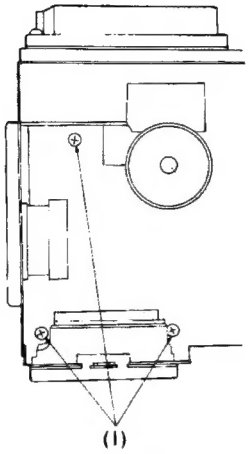


Fig. 7

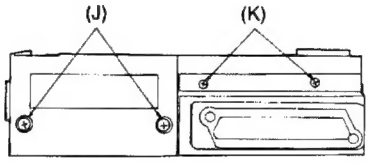


Fig. 8

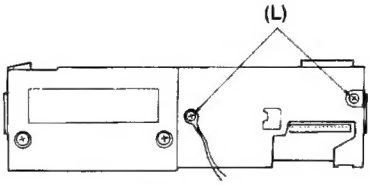


Fig. 9

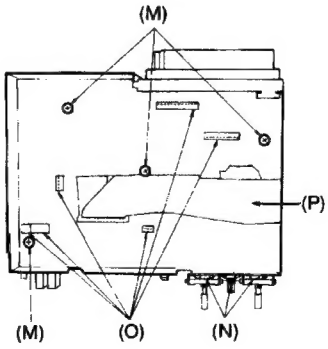


Fig. 10

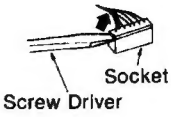


Fig. 11

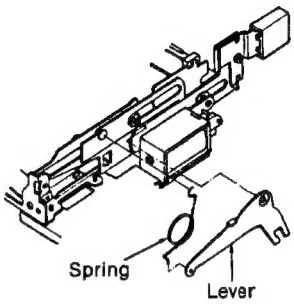


Fig. 12

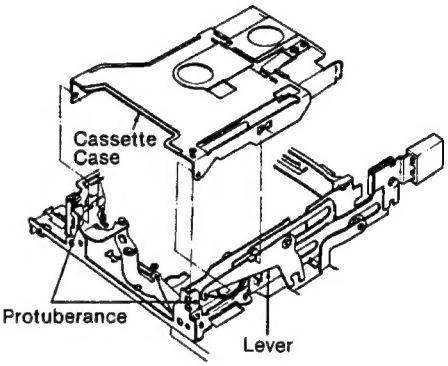
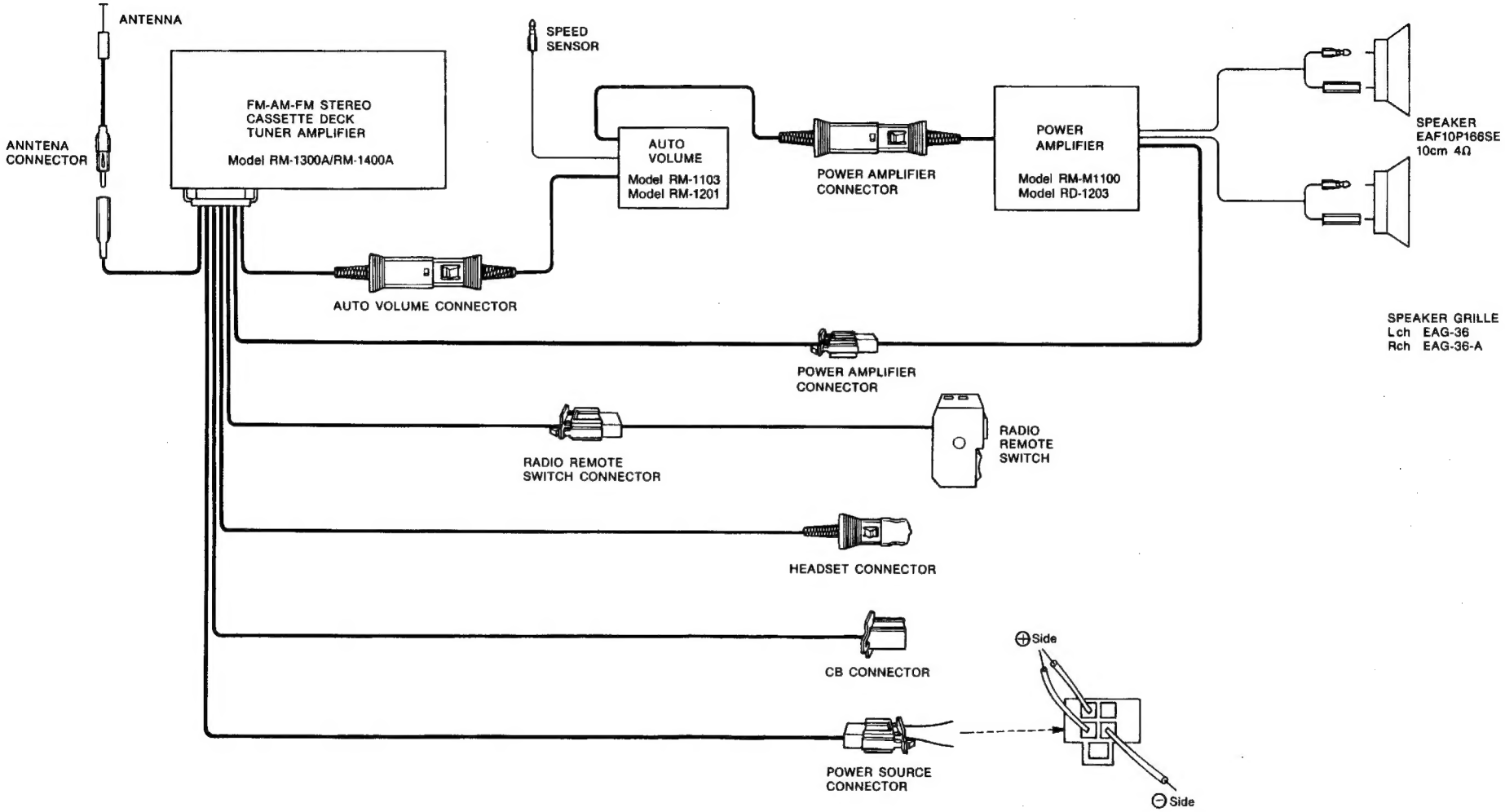


Fig. 13

Ref. No.	Procedure	Shown in Fig. —.	To remove —.	Remove —.
1	1, 2	1	Front Panel, Covers	Knob .....(A)×3
2		2, 3		Screw (3×6) mm .....(B)×12
3	1~5	4	Mechanism	Screw (2.6×5) mm .....(C)×2
4		5		Screw (2.6×5) mm .....(D)×3
5				Socket *1 .....(E)×2
6	1~6	5	Cassette Case *2	Loosen screw .....(F)×1
7	1~8	6	AM Circuit Board	Socket *1 .....(G)×2
8				Screw (3×6) mm .....(H)×2
9	1~9	7	LCD Circuit Board	Screw (3×6) mm .....(I)×3
10	1~5, 10	8	Deck EQ & Ambience Circuit Board	Screw (3×6) mm .....(J)×2
11	1, 2, 11, 12	8	Power Source Circuit Board	Screw (3×4) mm .....(K)×2
12		9		Screw (3×4) mm .....(L)×2
13	1, 2, 13~16	10	Main Circuit Board	Screw (3×6) mm .....(M)×4
14				Nut (7ϕ) .....(N)×3
15				Socket *1 .....(O)×7
16				Jumper (FPC) .....(P)×1

*1. Remove socket in the direction of arrow as shown in fig. 11.
*2. To reassemble, note the following.
(1) Insert the lever and spring in mechanism, as shown in fig. 12.
(2) Insert the cassette case as shown in fig. 13.

AUDIO SYSTEM CONNECTION



▼ Be sure to fold at the (▼) mark so that mark is on the outside.

HARNESS CONNECTION

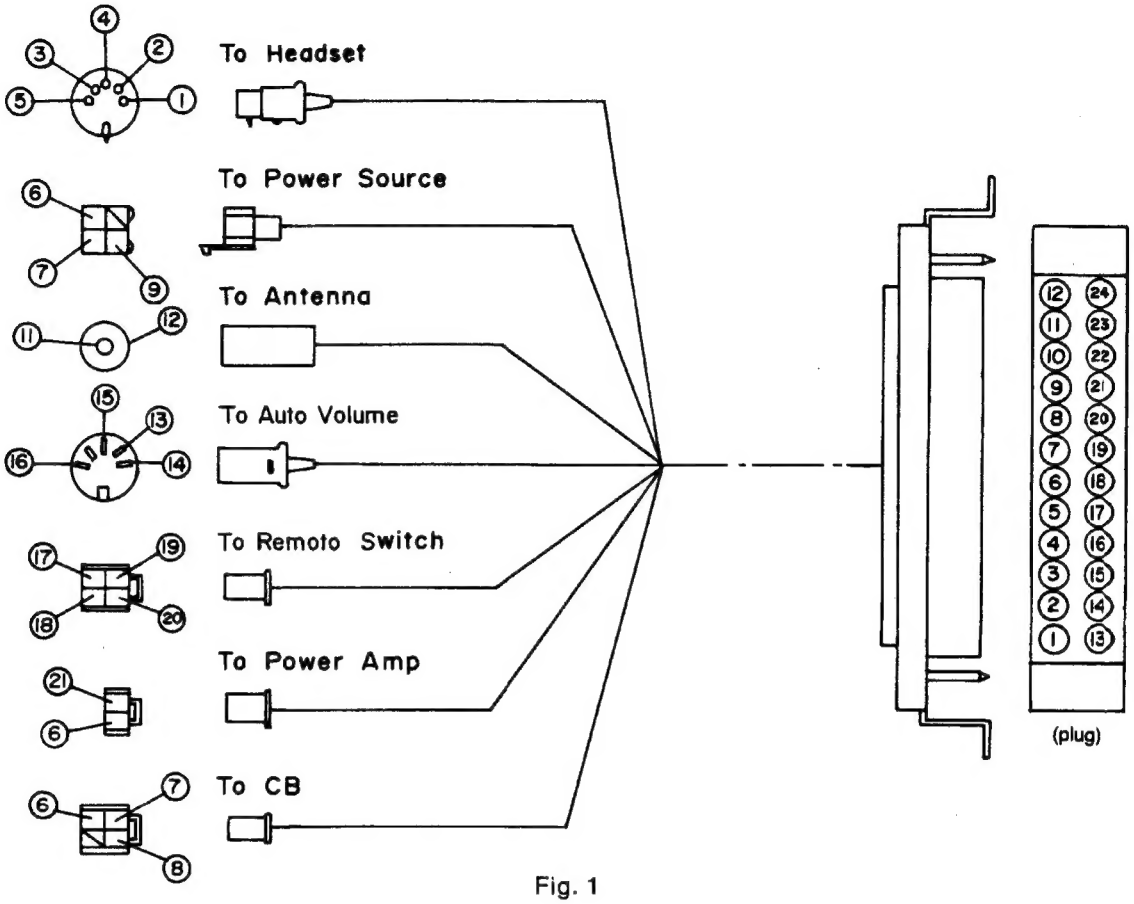
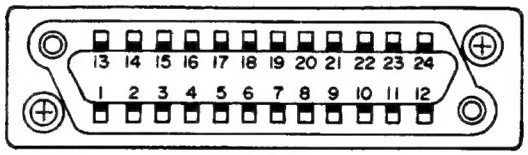


Fig. 1



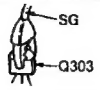
(socket)

① Microphone	⑬ Rch
② Earth	⑭ Lch
③ Rch	⑮ Earth
④ Earth	⑯ +B Out
⑤ Lch	⑰ Mute
⑥ Acc	⑱ Up
⑦ CB	⑲ Down
⑧ Earth	⑳ Earth
⑨ Earth	㉑ Earth
⑩ Earth	㉒ Earth
⑪ Antenna	㉓ Earth
⑫ Earth	㉔ Earth

Fig. 2

MEASUREMENTS AND ADJUSTMENTS

1. Set power switch to ON.
2. Mute switch on Remote switch to OFF.
3. SP/HS switch to HS.



4. Set volume control to maximum.
5. Set band switch to AM, FM.
6. Set SENS switch to DX.

■ AM IF ALIGNMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR		FREQUENCY DISPLAY SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
		CONNCTIONS	FREQUENCY				
	AM-IF ALIGNMENT						
(1)	AM	⑨.....(+) Earth.....(−) SG, Q303	450 kHz 30% Mod. at 400 Hz	Point of non-interference. (on/ about 600 kHz)	⑨...(+) ⑤...(−)	T302 (AM 1st IFT) T303 (AM 2nd IFT)	Adjust for maximum output.

■ AM RF ALIGNMENT

	BAND	AM SIGNAL GENERATOR		FREQUENCY DISPLAY SETTING	DC VOLT METER	ADJUSTMENT	REMARKS
		CONNECTIONS	FREQUENCY				
(1)	AM	Disconnect	No signal applied	530 kHz	⑫...(+) ⑤...(−)	L303 (AM OSC Coil)	Adjust for 1.2±0.05 V readig on DC voltmeter
(2)		Disconnect	No signal applied	1620 kHz	⑫...(+) ⑤...(−)	CT302 (AM OSC Trimmer)	Adjust for 7.8±0.1 V reading on DC voltmeter
(3)		Repeat steps (1) and (2).					
	BAND	AM SIGNAL GENERATOR		FREQUENCY DISPLAY SETTING	AC VOLT METER	ADJUSTMENT	REMARKS
		CONNECTIONS	FREQUENCY				
(4)	AM	Connect to antenna socket through AM RF dummy antenna. (Refer to Fig. 6)	600 kHz	600 kHz	⑮...(+) ⑤...(−)	L301 (AM ANT Coil) L304 (AM ANT Coil)	Adjust for maximum reading on AC voltmeter
(5)		"	1400 kHz	1400 kHz	⑮...(+) ⑤...(−)	CT301 (AM ANT Trimmer) CT303 (AM ANT Trimmer)	"
(6)		Repeat steps (4) and (5).					

■ AM NB ALIGNMENT

BAND	AM SIGNAL GENERATOR		FREQUENCY DISPLAY SETTING	OSCILLO SCOPE	ADJUSTMENT	REMARKS
	CONNECTIONS	FREQUENCY				
AM	Connect to antenna socket through AM RF dummy antenna. (Refer to Fig. 6)	600 kHz (400 Hz, 0% Mod. 74 dB)	600 kHz	⑩.....(+) ⑤.....(−)	T301 (AM NB)	Adjust for maximum wave from on oscilloscope.

■ FM ALIGNMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR		FREQUENCY DISPLAY SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
		CONNCTIONS	FREQUENCY				
	FM-IF ALIGNMENT						
(1)	FM	High side thru. 0.001μF to test point ⑨, Negative side to test point ⑤.	10.7 MHz SWP.	Point of non-interference. (on/ about 90 MHz)	Connect vert. amp. of scope to test point ⑨. Negative side to test point ⑤.	T1 (FM 1st IFT)	Adjust for maximum amplitude. (Refer to Fig. 3)
(2)	FM	"	"	"	"	T3 (FM 2nd IFT)	Adjust for maximum amplitude. (Refer to Fig. 4)

■ FM RF ALIGNMENT

	BAND	FM SIGNAL GENERATOR		FREQUENCY DISPLAY SETTING	DC VOLTMETER	ADJUSTMENT	REMARKS
		CONNECTIONS	FREQUENCY				
(1)	FM	Disconnect	No signal applied	87.5 MHz	⑫...(+) ⑤...(−)	L5 (FM OSC Coil)	Adjust for 1.2±0.05 V readig on DC voltmeter.
(2)		Disconnect	No signal applied	107.9 MHz	⑫...(+) ⑤...(−)	CT3 (FM OSC Trimmer)	Adjust for 8±0.1 V reading on DC voltmeter.
(3)		Repeat steps (1) and (2).					

	BAND	FM SIGNAL GENERATOR		FREQUENCY DISPLAY SETTING	AC VOLTMETER	ADJUSTMENT	REMARKS
		CONNECTIONS	FREQUENCY				
(4)	FM	Antenna socket (FM RF Dummy Fig. 7)	90.1 MHz (400 Hz 30%)	90.1 MHz	⑫...(+) ⑤...(−)	L1 (FM ANT Coil) L4 (FM ANT Coil)	Adjust for maximum reading on AC voltmeter
(5)		"	106.1 MHz (400 Hz 30%)	106.1 MHz	⑫...(+) ⑤...(−)	CT1 (FM ANT Trimmer) CT2 (FM ANT Timmer)	"
(6)		Repeat steps 4 and 5.					

■ DC BALANCE NB ALIGNMENT

BAND	FM SIGNAL GENERATOR		FREQUENCY DISPLAY SETTING	DC VOLTMETER (center "0")	ADJUSTMENT	REMARKS
	CONNECTIONS	FREQUENCY				
FM	Antenna scoket	90.1 MHz (400 Hz, 30% Mod, 60 dB)	90.1 MHz	⑦.....(+) ⑤.....(−)	T3 (FM 2nd IFT)	Adjust T3 for −0.05~0.05 V reading on DC voltmeter.

■ FM STEREO ALIGNMENT

Notes: 1. Stereo modulator.....
- Connect stereo modulator output to EXT MOD terminal of signal generator.
- Pilot signal modulation to "10%".

2. FM signal generator .....
- Frequency approximately 100 MHz/Output level to "60~70 dB", 1~3 mV.
- Modulation mode to "FM".

CIRCUIT	SIGNAL GENRATOR	FREQUENCY COUNTER	AC VOLTMETER	ADJUSTMENT	REMARKS
PILOT	90.1 MHz (0% Mod, 80 dB)	High side thru, 100 kΩ to test point ⑨. Negative side to ⑤.	——	VR2 (Pilot)	Adjust for 76.00 kHz±50 Hz readign on frequency counter.
SEPARATION	90.1 MHz (400 Hz, 30% Mod, 80 dB)	——	⑰...Lch (+) ⑯...Rch (+) ⑤...(−)	VR1 (Separation)	Make adjustment so that when the antenna input is subjected to L modulation (or R modulation.) R channel output (or L channel output) becomes minimum.

■ AZIMUTH ALIGNMENT

TAPE	AC VOLTMETER①	AC VOLTMETER②	ADJUSTMENT	REMARKS
Playback the azimuth tape. QZZCAC (10 kHz~20 dB)	⑦...(+) ⑤...(−)	Across headset ⑪...(+) ⑤...(−)	Azimuth Screw (Refer to Fig. 5)	Adjust for same reading on AC voltmeter① and ②.

■ DOLBY LEVEL ALIGNMENT

ITEM	INPUT	MEASUREMENT POINT	SPECIFICATION	ADJUSTMENT POINT	REMARKS
Dolby Level	Tape QZZCFM (315 Hz 0 dB)	⑦...(R) ⑪...(L) ⑤...(−)	420 mV±1 dB	VR501 (R) VR502 (L)	Dolby switch ...OFF

■ ALIGNMENT POINT

*See the schematic diagram and the circuit board and wiring connection diagram for the location of the test points.

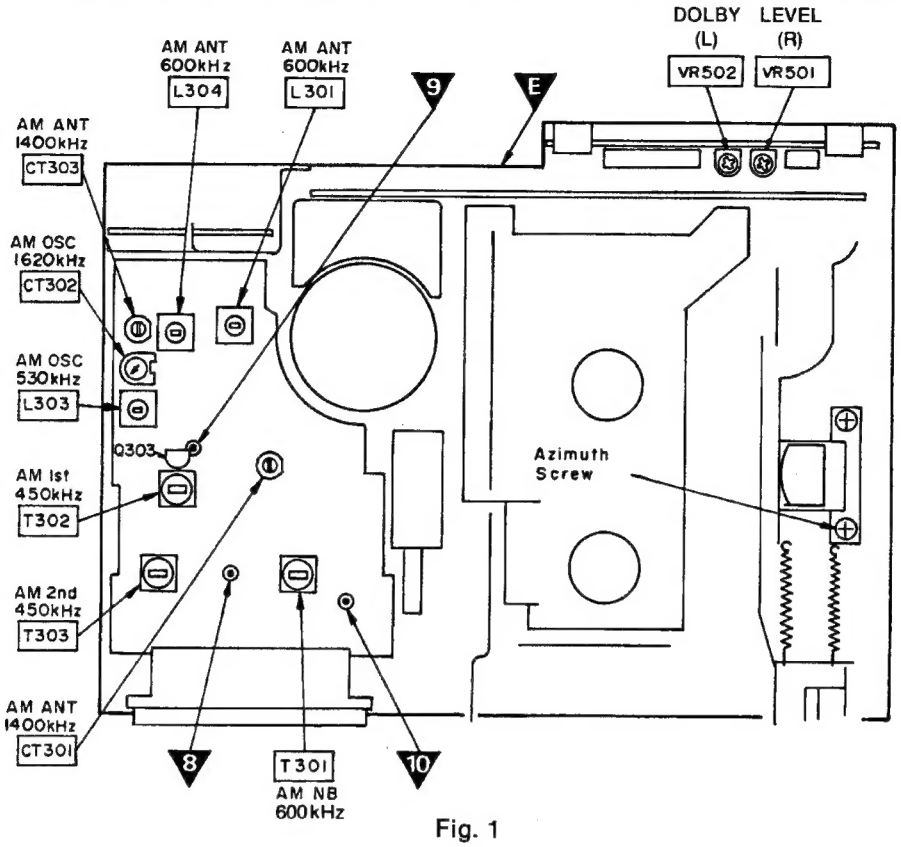


Fig. 1

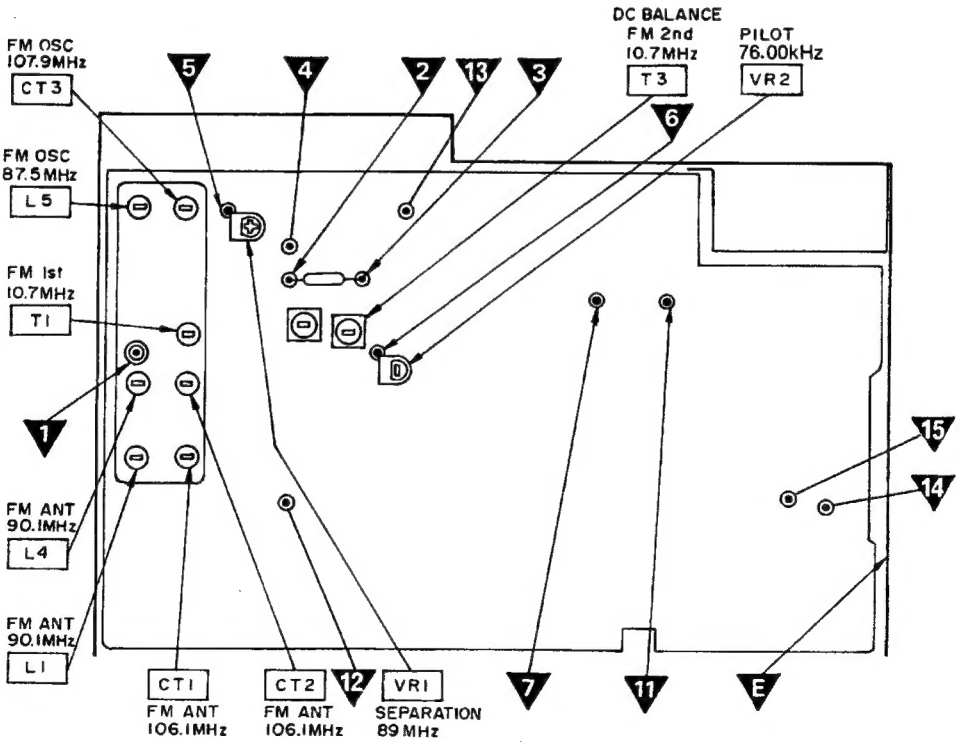


Fig. 2

■ WAVE FORM

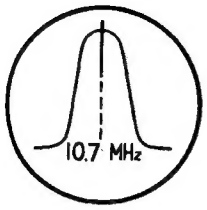


Fig. 3

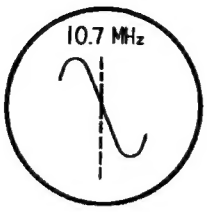


Fig. 4

Fig. 5

■ AM RF DUMMY ANTENNA

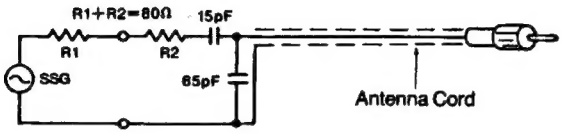


Fig. 6

■ FM RF DUMMY ANTENNA

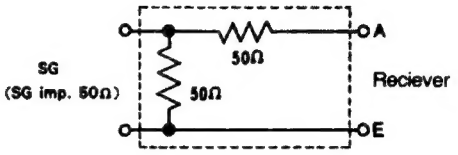


Fig. 7

LIQUID CRYSTAL DISPLAY (LCD)

1) The common and segment terminals of the LCD are connected in the following way:

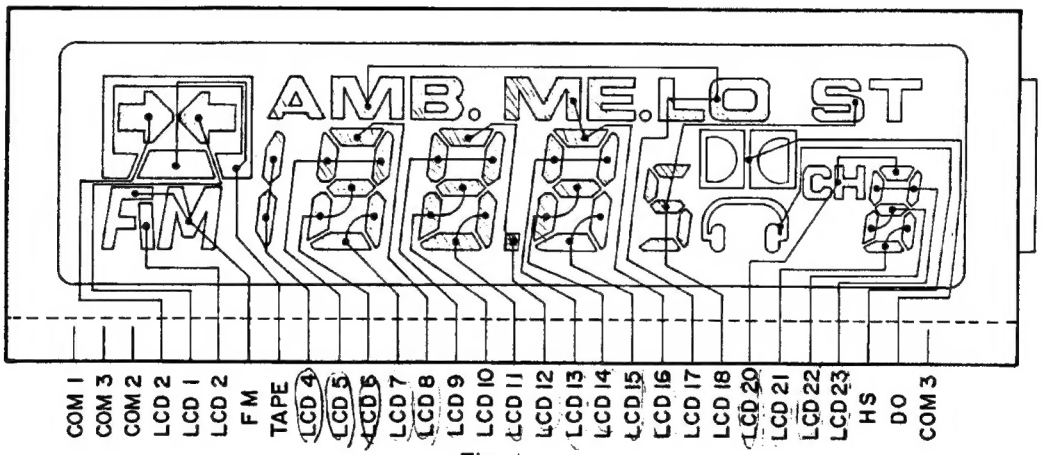


Fig. 1

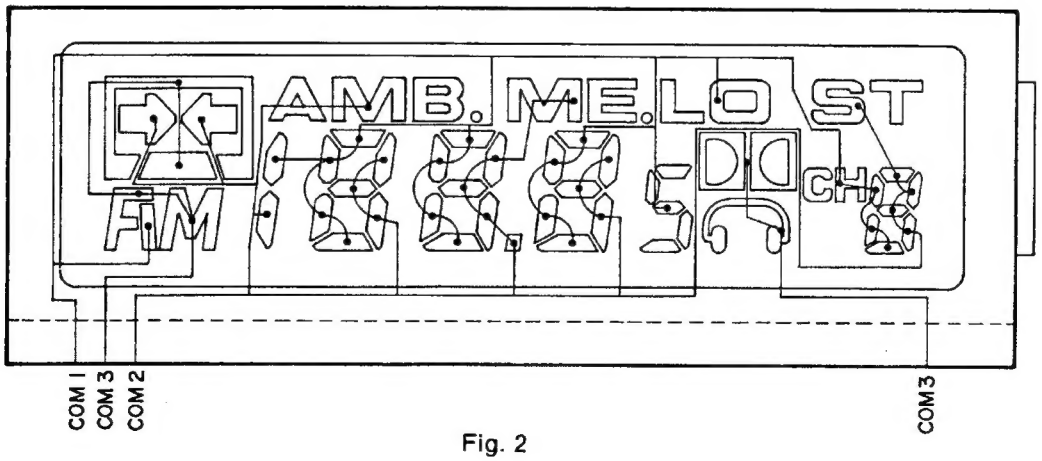


Fig. 2

2) Output signal waveforms of LCD segment

The illumination or nonillumination of segments (LCD1~23) on the LCD is determined by the combination of the segment drive signal and the common drive signals (COM1 and 2) from IC401. (See Fig. 3.)
The illumination or nonillumination of segments other than LCD1~23 (FM, Tape, HS, DO) is determined by the combination of the 80Hz signal made by the oscillation circuits in Q403 and Q404 and the segment drive signal made in IC402.
ex. Example display ("3")

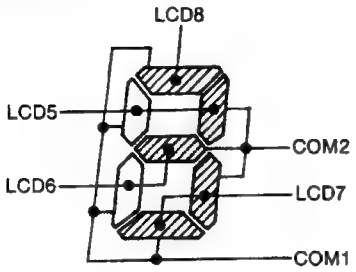


Fig. 3

UPD1708G555 (IC401): EACH TERMINAL FUNCTION & WAVEFORM

1) Terminal View

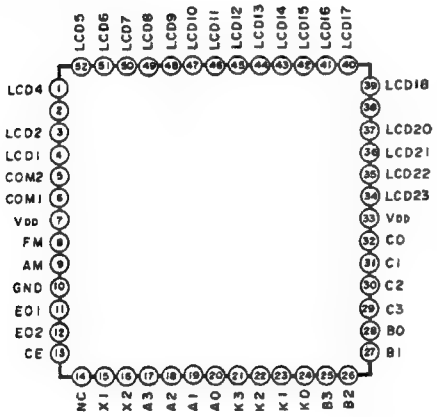


Fig. 1

2) Block Diagram

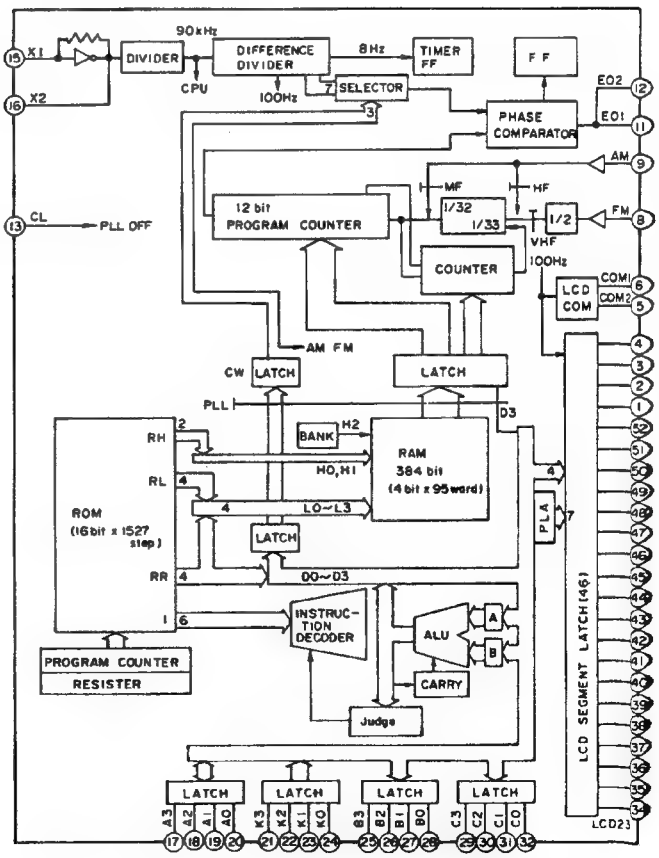


Fig. 2

3) Function of terminal (PLL controller IC401)

Pin No.	Mark	Description of terminal
1 ~ 4 34 ~ 52	LCD4 ~ LCD1 LCD23 ~ LCD5	Segment signal output terminal for display. (Refer to Fig. 1.)
5	COM2	Common signal output terminal connected to LCD. Output is delivered in 3 values of ground, 1/2V_{DD} and V_{DD} (at 5ms intervals) in a period of 50Hz. The segment turns ON when the difference in voltage is ± V_{DD} between these terminals and LCD1~LCD23.
6	COM1	
7	V_{DD}	Power supply terminal of device. Voltage of 5V±10% is supplied during operation of device. To hold the internal data memory (RAM), the voltage can be decreased to 2.5V. **Note:** Pins 7 and 33 are connected inside the chip. It is unnecessary to supply voltage to the pins.
33	V_{DD}	
8	FM	Input is local oscillator output (VCO) in a range of 10~130MHz (0.3Vp-p, min.). There are 1/2 fixed frequency division prescaler and 2-step (1/32, 1/33) prescaler internally. Therefore, when deciding the frequency dividing value of programmable divider, it must be decided from the frequency obtained by halving the local oscillator output (VCO).
9	AM	Input is local oscillator output (VCO) in a range of 0.5~20MHz (0.1Vp-p, min.). When the mode is shifted to FM, the AM terminal voltage automatically becomes the supply voltage of device.
10	GND	Ground terminal.
11	E01	When the divided oscillator frequency is higher than the standard frequency, H-level output is delivered from these terminals. When it is lower, L-level (0V) output is delivered. When they coincide, it results in floating.
12	E02	
13	CE	Device selection signal input terminal. The signal level should be high when the device is operated, and low when not operated. With this terminal shifted to low level, LCD (liquid crystal display) turns off and the memory is held.
14	NC	Not used in this unit.
15	X1	Connecting terminal for crystal oscillator. The crystal connected is 4.5MHz.
16	X2	
17	A3 (SD)	Inputs high signal when broadcast is received during auto tuning in the radio mode and low signal at all other times.
18	A2	Outputs high signal when ambience switch is pressed and turns on Q18.

Pin No.	Mark	Description of terminal
19	A1	——
20	A0	——
21 ≀ 24	K3 ≀ K0	Input terminal for key return signal from switch matrix.
25 ≀ 28	B3 ≀ B0	Output terminal for key scan signal to switch matrix.
29	C3	Output METAL-Dx/Lo
30	C2	Outputs switching signal for FM/AM bands. When high signal is output, FM demodulation circuit operates and FM mode is set.
31	C1	Outputs muting signal. Normally high; low during muting.
32	CO	Not used in this unit.
33	Vcc	+5V terminal.

ELECTRICAL PARTS LIST

Numbering System of Resistor

Example

ERD	25	F	J	101
Type	Wattage	Shape	Tolerance	Value (100Ω)
ERX	2	AN	J	2R2
Type	Wattage	Shape	Tolerance	Value (2.2Ω)

Resistor Type	Wattage Tolerance
ERD: Carbon ERG: Metal Film ERX: Metal Film ERQ: Fuse Type Metal RRD: Carbon (Chip Type)	10 : 1/8 W J : ±5% 12 : 1/2 W 25 : 1/4 W 1 : 1 W 18 : 1/8 W

Numbering System of Capacitor

Example

ECKD	1H	102	Z	F
Type	Voltage	Value (1000 pF)	Tolerance	Peculiarity
ECEA	50	M	R47	
Type	Voltage	Peculiarity	Value (0.47 μF)	

Capacitor Type	Voltage		Tolerance
	ECEA Type	Other	
ECEA: Electrolytic ECCD: Ceramic ECKD: Ceramic ECQM: Polyester ECQP: Polypropylene ECET: Electrolytic ECEA□□□N: Non Polar Electrolytic QCU□: Ceramic (Chip Type) ECUX: Ceramic (Chip Type)	0J : 6.3 V 1A : 10 V 1C : 16 V 1E : 25 V 1H : 50 V 1V : 35 V 50 : 50 V 25 : 25 V 16 : 16 V	2H : 500 V DC 1 : 100 V DKC : 400 V AC	C : ±0.25 pF J : ±5% K : ±10% Z : +80%, −20% P : +100%, −0%

Ref. No.	Part No.	Part Name & Description
INTEGRATED CIRCUITS		
IC 1	LA1170	Integrated Circuit
IC 2	RVILA1140	Integrated Circuit
IC 3	RVISTK2110D	Integrated Circuit
IC 4	RVILA3375	Integrated Circuit
IC 5	RVITC4011BP	Integrated Circuit
IC 6	RVITA78L006P	Integrated Circuit
IC 7	RVIM51203L	Integrated Circuit
IC 8	RVIUPC1228H	Integrated Circuit
IC 9	RVIBA6133	Integrated Circuit
IC 10	RVILM1131C	Integrated Circuit
IC 11	RVITA7230P	Integrated Circuit
IC 301	RVIUPC1215VE	Integrated Circuit
IC 302	RVIM57171L	Integrated Circuit
IC 401	UPD1708G555	Integrated Circuit
IC 402	RVITC4030BP	Integrated Circuit
IC 501	RVIUPC1228H	Integrated Circuit
IC 502	RVIUPC78L06	Integrated Circuit
IC 701	AN6248	Integrated Circuit
IC 702, 703	DM106	Integrated Circuit
TRANSISTORS		
Q 1	3SK114Y	Transistor
Q 2, 4, 5, 10, 11, 12, 13, 15, 16, 19, 23, 34, 36, 37, 41, 44	2SD601R	Transistor
Q 6, 7	2SD601S	Transistor
Q 8, 9	2SD601Q	Transistor
Q 14, 17, 26, 27, 28, 29, 30, 31, 32, 33	2SB709	Transistor
Q 18	2SK160K5	Transistor
Q 38, 43	2SA683R	Transistor
Q 40	2SA952K2	Transistor, Si 160MH 0.6W
Q 42	2SC1383Q	Transistor
Q 45	2SC2404C	Transistor
Q 46, 751, 752	2SC1685-Q	Transistor
Q 301	2SK184BL	Transistor
Q 302	2SC2295B	Transistor, Si 250MH 0.1W
Q 303	2SC1359B	Transistor
Q 401	2SK160K4	Transistor, Field Effect
Q 402	2SC1623L6A	Transistor, Si 300MH 0.15W
Q 403, 404	2SD601R	Transistor
Q 501, 502, 503, 504	2SD601R	Transistor
Q 701, 703, 704, 705, 706, 707, 710, 711, 712	2SD601R	Transistor
Q 702	2SC2001K1	Transistor
Q 708, 709	2SD1253P	Transistor

Ref. No.	Part No.	Part Name & Description
DIODES & RECTIFIERS		
D 1, 2, 3	RVD1SV103	Diode
D 4, 5	MA56	Diode
D 7, 9, 10, 16, 17, 18, 34, 35, 37, 50, 51, 74	MA165	Diode, Si
D 8	RVDKB265G	Diode
D 11, 39, 46	MA1056	Diode
D 12, 13, 20, 21, 23, 25, 30, 31, 38, 40, 45	MA151WK	Chip Diode
D 14, 15, 33, 36, 42	MA151WA	Chip Diode
D 22, 27, 28, 29, 41	MA153	Diode
D 32, 43	MA161	Diode
D 44	MA1120	Diode
D 47	MA1100	Diode
D 49	RVDRD6R2EB	Diode
D 301	MA153	Diode
D 303, 304, 309, 501	MA165	Diode, Si
D 305	RVDKB265G	Diode
D 306, 307, 308	RVD1SV149	Diode
D 401, 402, 403, 404, 406	MA165	Diode, Si
D 405	MA151WA	Chip Diode
D 502	MA1068M	Diode
D 503	MA1082M	Diode
D 601, 602	SM112	Rectifier
D 701	MA1091M	Diode
D 702, 705	MA151WK	Chip Diode
D 703, 704	SM112	Rectifier
COILS		
L 1	RL04N135	Coil, FM Antenna
L 2, 3	RLQZB2R2K	Coil, Choke
L 4	RL04N170	Coil, FM Antenna
L 5	RL04N96	Coil, FM Antenna
L 6	RLQZB470K	Coil, Choke
L 301, 304	RLA2A3	Coil, AM Anttenna
L 302	RLQZB102K	Coil Choke
L 303	RL02A8	Coil, AM Oscillator
L 601, 602	RLT6D1A	Coil

Ref. No.	Part No.	Part Name & Description
TRANSFORMERS		
T 1	RLI4B554	I.F. Transformer
T 2	RLI4A23	IFT, FM
T 3	RLI4A24	IFT, FM
T 301, 303	RLI2A16	AM NB, IFT, FM
T 302	RLI2A17	IFT, AM
TRIMMER CONDENSERS		
CT 1, 2	RCVTZ20F	Trimmer Capacitor
CT 3	RCVTZ11F	Trimmer Capacitor
CT 301, 303	RCVTZ20F	Trimmer Capacitor
CT 302	RCVCTZ51F	Trimmer Capacitor
VARIABLE RESISTORS		
VR 1	EVND4AA00B14	Variable Resistor, Preset, 10kΩ (B)
VR 2	EVNM4AA00B14	Variable Resistor, Preset, 10kΩ (B)
VR 3	EVURV3255B15	Variable Resistor, Preset, 100kΩ (B) (include S1)
VR 4	EVURW3255B24	Variable Resistor, Preset, 20kΩ (B) (include S2)
VR 5	EVU5KAP15D24	Variable Resistor, Preset, 20kΩ (D)
VR 501, 502	RVNCC24B1	Variable Resistor
RESONATOR		
X 401	RVCA4500NZN	Crystal
CERAMIC FILTERS		
CF 1	RVFSFE107MSR	Ceramic Filter
CF 2	RVFSFE107MAR	Ceramic Filter
CF 301	RVFSFP450H	Ceramic Filter
CF 302	RVFCFM2450Z	Ceramic Filter
PILOT LAMP		
PL 1	XANR13T33	Neon Lamp
SWITCHES		
S 3, 4, 5, 6, 7, 8, 9, 10	EVQQSQ04K	Switch, PROGRAM, M/ME, BAND, AMB, SENS/DOLBY
S 701, 702	ESB643	Switch, FF/REW
S 703	RSS2C02Z	Switch, Tape
S 705	RFA36Z	Switch, Muting
S 706	RFA37Z	Switch, Head

Ref. No.	Part No.
CAPACITORS	
C 1, 2, 4, 8, 9, 10, 15	RCUX1H102MD
C 3	RCUX1H270KC
C 5, 11, 81, 83, 89, 107, 109, 119, 121, 124, 125, 134, 135	ECEA1CK100
C 6, 16	RCUX1H150KC
C 12, 13, 20, 25, 40, 68, 69, 88, 103, 105, 110, 115, 116, 164	RCUX1H103ZF
C 14, 19	RCUX1H271K
C 17	RCUX1H390KC
C 18	RCUX1H180KC
C 22, 46, 108, 114, 120, 130, 131	ECUX1E473MD
C 23	ECUX1H101JR
C 24	ECEA1AK470
C 26, 52	RCUX1E333ZF
C 27, 37, 38, 43, 59, 60, 61, 62, 63, 64, 75, 78, 79, 87, 143, 156	ECEA1HK010
C 28	RCUX1H470KC
C 29, 30, 35, 50, 55, 57, 82	ECUX1H223MD
C 31, 76, 85, 86, 138, 139	ECEA1HK4R7
C 32, 128, 129	ECEA1HKR33
C 33, 42, 80	ECEA1CK470
C 34, 44	RCUX1H101K
C 36, 39, 142, 160	RCUX1E223ZF
C 41, 102, 149	ECEA1AK220
C 45	ECEA1CN100S
C 47	RCUX1H332MD
C 48, 141, 146, 154	ECUX1E104MD
C 49, 140	ECEA1CU221
C 51	ECQP2A102JZ
C 53, 106, 147, 150	ECEA1HK2R2
C 54, 65, 66, 71, 72, 73, 74	ECEA1HK3R3
C 56, 58	ECSF1CE105
C 67	ECEA0JK101
C 77, 117	ECEA1CU101
C 84	ECEA1AK330
C 98, 99, 111, 126, 127	ECEA1HK0R1
C 104	ECEA1AU101
C 112	RCUX1H181K
C 113	ECEA1HKR22
C 118	RCUX1H560KC
C 122, 145, 153	ECEA1AU221
C 123	ECEA1AU471
C 136, 137	ECUX1E333MD
C 144	ECEA1CU471
C 148, 152	RCUX1H472MD
C 151, 155	ECSF1VE104
C 161	ECEA0JK470
C 301, 303, 305, 310, 311, 320, 324, 325, 336, 511, 512, 514	RCUX1E223ZF
C 302	RCUX1H471KB
C 304	RCUX1H101K
C 306, 322, 504, 508, 515	ECEA1CK100
C 307, 317, 334	ECUX1H153MD
C 308, 327, 505	ECEA1CK470
C 309, 323, 338, 340, 350	RCUX1E103MD
C 312, 326, 519, 520	ECEA1EK4R7
C 313	ECKD1H103ZF
C 314	RCUX1H102MD
C 315	RCUX1H103ZF
C 316	RCUX1H220KC
C 318	ECQP2A471JZ
C 319	ECEA1HKR47
C 321, 518	ECEA1AK220
C 328	RCUX1E333ZF
C 329, 516, 517	ECEA1HK010
C 330	RCUX1H472MD
C 332, 503, 507	RCUX1H682MD
C 342	RCUX1H332MD
C 344	ECUX1H223MD
C 346	ECUX1E473MD
C 348	ECEA1HK0R1
C 401	RCUX1H102MD
C 402	ECQV1H474JZ
C 403, 404, 405, 413, 420	RCUX1H103ZF
C 406	ECEA1HK0R1
C 407, 408	RCUX1H220KC
C 409	ECEA1CK100
C 410, 411, 412	RCUX1H221K
C 414	ECKD1H103ZF
C 421	ECEA0JK221
C 422	ECEA0JU102
C 424	ECEA1HK010
C 425	ECUX1E473MD
C 426	ECCD1H820K
C 501, 509	ECSF1CD224
C 502, 506	ECEA0JK330
C 510, 521	RCUX1H152MD
C 513	ECEA1AU221
C 601, 604, 605, 606, 608, 609, 610, 611, 612, 613, 614	ECUXAH102ZF
C 602, 603	ECUX1E104MD
C 607, 615	ECEA1CU471
C 701	ECEA1HU010
C 702	ECEA1AU470
C 703	ECQV1H334JZ
C 704, 705	ECEA1AK470
C 706, 707	ECUX1E473MD
C 708	ECUX1E104MD
C 709	RCUX1H682MD
C 710, 711	ECEA1CU330

Ref. No.	Part No.
RESISTORS	
R 1, 2	ERJ6GCJ681
R 3, 14, 16, 51, 52, 82, 83, 91, 93, 97, 98, 121, 122, 127, 128, 129, 132, 134, 135, 137, 138, 139, 140, 141, 188	ERJ6GCJ104
R 4, 104, 120, 200	ERJ6GCJ224
R 5, 172, 173	ERJ6GCJ274
R 6, 15, 27, 35, 86, 87, 88, 89, 102, 103, 118, 124, 133, 153, 176, 177, 184	ERJ6GCJ473
R 7, 156	ERJ6GCJ334
R 8	ERJ6GCJ181
R 9, 10	ERJ6GCJ470
R 11, 18, 21, 32, 40, 99, 105	ERJ6GCJ101
R 12, 22, 26, 61, 62, 65, 66, 100, 101, 119, 157, 158, 187	ERJ6GCJ102
R 17, 28, 55, 76, 77, 145, 146, 195	ERJ6GCJ103
R 19, 23, 130, 131	ERJ6GCJ331
R 20, 142	ERJ6GCJ471
R 24, 43	ERJ6GCJ822
R 25	ERJ6GCJ823
R 29, 41, 69, 70, 123, 125, 178, 179	ERJ6GCJ472
R 30, 59, 60, 154, 164, 165, 174, 175, 181, 202	ERJ6GCJ332
R 31	ERD25FJ103
R 33, 75	ERJ6GCJ821
R 34, 44	ERJ6GCJ123
R 36, 39, 47, 48, 56, 67, 68, 73, 74, 80, 81, 84, 85, 92, 95, 106, 136	ERJ6GCJ223
R 37, 159, 189, 196	ERJ6GCJ222
R 38, 71, 72, 183	ERJ6GCJ333
R 42, 96, 152	ERJ6GCJ153
R 45, 46, 53, 54, 151	ERJ6GCJ392
R 49, 50, 94	ERJ6GCJ563
R 57, 58, 144, 203	ERJ6GCJ105
R 63, 64	ERJ6GCJ154
R 78, 79, 186	ERJ6GCJ273
R 147	ERJ6GCJ151
R 148	ERJ6GCJ271
R 149, 150	ERJ6GCJ394
R 155, 190	ERJ6GCJ561
R 166, 167	ERJ6GCJ562
R 168, 169	ERJ6GCJ122
R 170, 171	ERJ6GCJ683
R 182	ERJ6GCJ682
R 191, 192, 193, 194	ERJ6GCJ272
R 197, 198	ERJ6GCJ221
R 201	ERJ6GCJ183
R 206	ERDS2TJ104
R 301, 307, 309, 327, 505, 511	ERJ6GCJ474
R 302, 320, 321, 516, 518	ERJ6GCJ332
R 303	ERDS2TJ332
R 304	ERJ6GCJ105
R 305	ERJ6GCJ270
R 306	ERJ6GCJ182
R 308	ERJ6GCJ330
R 310, 330, 333	ERJ6GCJ470
R 311, 312, 314, 522	ERJ6GCJ104
R 313, 317, 319	ERJ6GCJ103
R 315	ERJ6GCJ101
R 316, 527, 528	ERJ6GCJ473
R 318	ERJ6GCJ152
R 322, 324, 326, 526, 529	ERJ6GCJ222
R 323, 328	ERJ6GCJ153
R 325	ERJ6GCJ151
R 332	ERJ6GCJ683
R 334	ERJ6GCJ183
R 401	ERJ6GCJ682
R 402	ERJ6GCJ222
R 403	ERJ6GCJ472
R 404, 414	ERJ6GCJ473
R 405, 406, 407, 408, 409, 410, 416	ERJ6GCJ104
R 412	ERJ6GCJ331
R 413	ERJ6GCJ102
R 415, 421	ERJ6GCJ823
R 417, 419	ERJ6GCJ223
R 418	ERJ6GCJ333
R 420	ERJ6GCJ101
R 422, 423, 425, 426	ERJ6GCJ393
R 424	ERJ6GCJ683
R 427	ERJ6GCJ470
R 428	ERJ6GCJ681
R 501, 513	ERJ6GCJ274
R 502, 509	ERJ6GCJ224
R 503, 508, 517	ERJ6GCJ334
R 504, 510	ERJ6GCJ121
R 506, 512, 520, 519	ERJ6GCJ223
R 507	ERDS2TJ101
R 514, 515, 521	ERJ6GCJ272
R 523	ERJ6GCJ333
R 524	ERJ6GCJ331
R 525	ERJ6GCJ681
R 530	ERJ6GCJ561
R 702, 712, 714	ERJ6GCJ224
R 703, 720, 722	ERJ6GCJ222
R 704	ERJ6GCJ333
R 705, 713	ERJ6GCJ104
R 706	ERJ6GCJ471
R 707, 710	ERJ6GCJ472
R 708, 709	ERJ6GCJ473
R 711	ERJ6GCJ223
R 715	ERJ6GCJ122
R 716, 718	ERJ6GCJ103
R 717	RRD18XJ103
R 719	RRD18XJ122
R 721, 724	ERJ6GCJ102
R 723, 725	RRD18XJ102
CHIP JUMPER	
RJ 1, 2, 3, 4, 5	RRD18XK000
RJ 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23	ERJ6GCJ000
RJ 301, 302, 303, 304, 305, 306, 307, 503, 504	ERJ6GCJ000
RJ 401, 402	ERJ6GCJ000
RJ 501, 502, 601	RRD18XK000
RJ 701, 702, 703, 704, 705, 706, 707, 708, 709, 712	ERJ6GCJ000
RJ 707, 710, 711	RRD18XK000

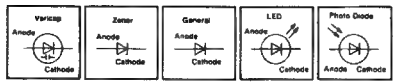
■ PARTS NO. FUNCTION NAME AND ZONE NO. SCHEMATIC DIAGRAM (MAIN CIRCUIT)

Ref. No.	Zone	Part No.	Function Name	Ref. No.	Zone	Part No.	Function Name
IC1	A · 4	LA1170	FM MIX & OSC	Q1	A · 2	3SK114Y	FM RF AMP
IC2	B · 6	RVILA1140	FM IF & DET	Q2	C · 2	2SD601R	SWITCHING
IC3	A · 8	RVISTK2110D	FM NOISE BRANKER	Q4	B · 12	2SD601R	SWITCHING
IC4	B · 10	RVILA3375	FM STEREO MPX	Q5	C · 12	2SD601R	SWITCHING
IC5	D · 4	RVITC4011BP	PRE SCALOR	Q6	A · 13	2SD601S	PRE AMP
IC6	F · 4	RVITA78L006P	REGULATOR	Q7	B · 13	2SD601S	PRE AMP
IC7	D · 5	RVIM51203L	MUTE CONTROLLER	Q8	A · 13	2SD601Q	BUFFER AMP
IC8	E · 5	RVIUPC1228H	DUAL OPERATIONAL AMP	Q9	B · 13	2SD601Q	BUFFER AMP
IC9	C · 9	RVIBA6133	DUAL POWER AMP	Q10	B · 14	2SD601R	SWITCHING
IC10	E · 8	RVILM1131C	AMBIENCE	Q11	C · 14	2SD601R	SWITCHING
IC11	E · 13	RVITA7230P	DOLBY NR	Q12	D · 14	2SD601R	SWITCHING

Ref. No.	Zone	Part No.	Function Name	Ref. No.	Zone	Part No.	Function Name
Q13	D · 14	2SD601R	SWITCHING	D12	D · 13	MA151WK	SWITCHING
Q14	D · 11	2SB709R (2SB709)	SWITCHING	D13	D · 13	MA151WK	SWITCHING
Q15	D · 11	2SD601R	SWITCHING	D14	D · 12	MA151WA	SWITCHING
Q16	D · 11	2SD601R	SWITCHING	D15	D · 12	MA151WA	SWITCHING
Q17	D · 11	2SB709R (2SB709)	SWITCHING	D16	E · 12	MA165	SWITCHING
Q18	D · 9	2SK160K5	SWITCHING	D17	C · 11	MA165	SWITCHING
Q19	C · 7	2SD601R	SWITCHING	D18	C · 8	MA165	SWITCHING
Q23	D · 5	2SD601R	SWITCHING	D20	D · 4	MA151WK	SWITCHING
Q26	E · 2	2SB709R (2SB709)	SWITCHING	D21	D · 2	MA151WK	SWITCHING
Q27	F · 2	2SB709R (2SB709)	SWITCHING	D22	F · 1	MA153	SWITCHING
Q28	F · 2	2SB709R (2SB709)	SWITCHING	D23	G · 1	MA151WK	SWITCHING
Q29	F · 2	2SB709R (2SB709)	SWITCHING	D24	G · 1	MA165	SWITCHING
Q30	F · 2	2SB709R (2SB709)	SWITCHING	D25	G · 1	MA151WK	SWITCHING
Q31	G · 2	2SB709R (2SB709)	SWITCHING	D27	G · 2	MA153	SWITCHING
Q32	G · 2	2SB709R (2SB709)	SWITCHING	D28	G · 2	MA153	SWITCHING
Q33	G · 2	2SB709R (2SB709)	SWITCHING	D29	G · 2	MA153	SWITCHING
Q34	G · 3	2SD601R	SWITCHING	D30	F · 2	MA151WK	SWITCHING
Q36	E · 7	2SD601R	SWITCHING	D31	F · 2	MA151WK	SWITCHING
Q37	G · 9	2SD601R	SWITCHING	D32	E · 3	MA161	SWITCHING
Q38	F · 10	2SA684-RNC	SWITCHING	D33	F · 3	MA151WA	SWITCHING
Q40	F · 10	2SA952K2	SWITCHING	D34	F · 4	MA165	SWITCHING
Q41	G · 10	2SD601R	SWITCHING	D35	F · 4	MA165	SWITCHING
Q42	F · 10	2SC1383Q	REGULATOR	D36	F · 5	MA151WA	SWITCHING
Q43	F · 12	2SA684-RNC	SWITCHING	D37	E · 6	MA165	SWITCHING
Q44	F · 12	2SD601R	SWITCHING	D38	E · 6	MA151WK	SWITCHING
Q45	B · 3	2SC2404C	OSC BUFFER	D39	E · 6	MA1056	REGULATOR
Q46	D · 3	2SC1684R	SWITCHING	D40	F · 11	MA151WK	SWITCHING
D1	B · 2	RVD1SV103	FM TUNING	D41	F · 6	MA153	SWITCHING
D2	B · 3	RVD1SV103	FM TUNING	D42	F · 7	MA151WA	SWITCHING
D3	C · 4	RVD1SV103	FM TUNING	D43	G · 7	MA161	SWITCHING
D4	B · 2	MA56	SWITCHING	D44	F · 10	MA1120	REGULATOR
D5	B · 2	MA56	SWITCHING	D45	E · 4	MA151WK	SWITCHING
D6	C · 5	MA1082M	REGULATOR	D46	F · 4	MA1056	SWITCHING
D7	A · 6	MA165	SWITCHING	D47	F · 5	MA1100	SWITCHING
D8	B · 8	RVDKB265G	SWITCHING	D49	H · 6	RVDRD6R2EB	REGULATOR
D9	B · 8	MA165	SWITCHING	D50	G · 1	MA165	SWITCHING
D10	C · 10	MA165	SWITCHING	D51	F · 6	MA165	SWITCHING
D11	A · 14	MA1056	REGULATOR	D74		MA165	

( ) ····· Supply Parts Number.

SCHEMATIC DIAGRAM (MAIN)

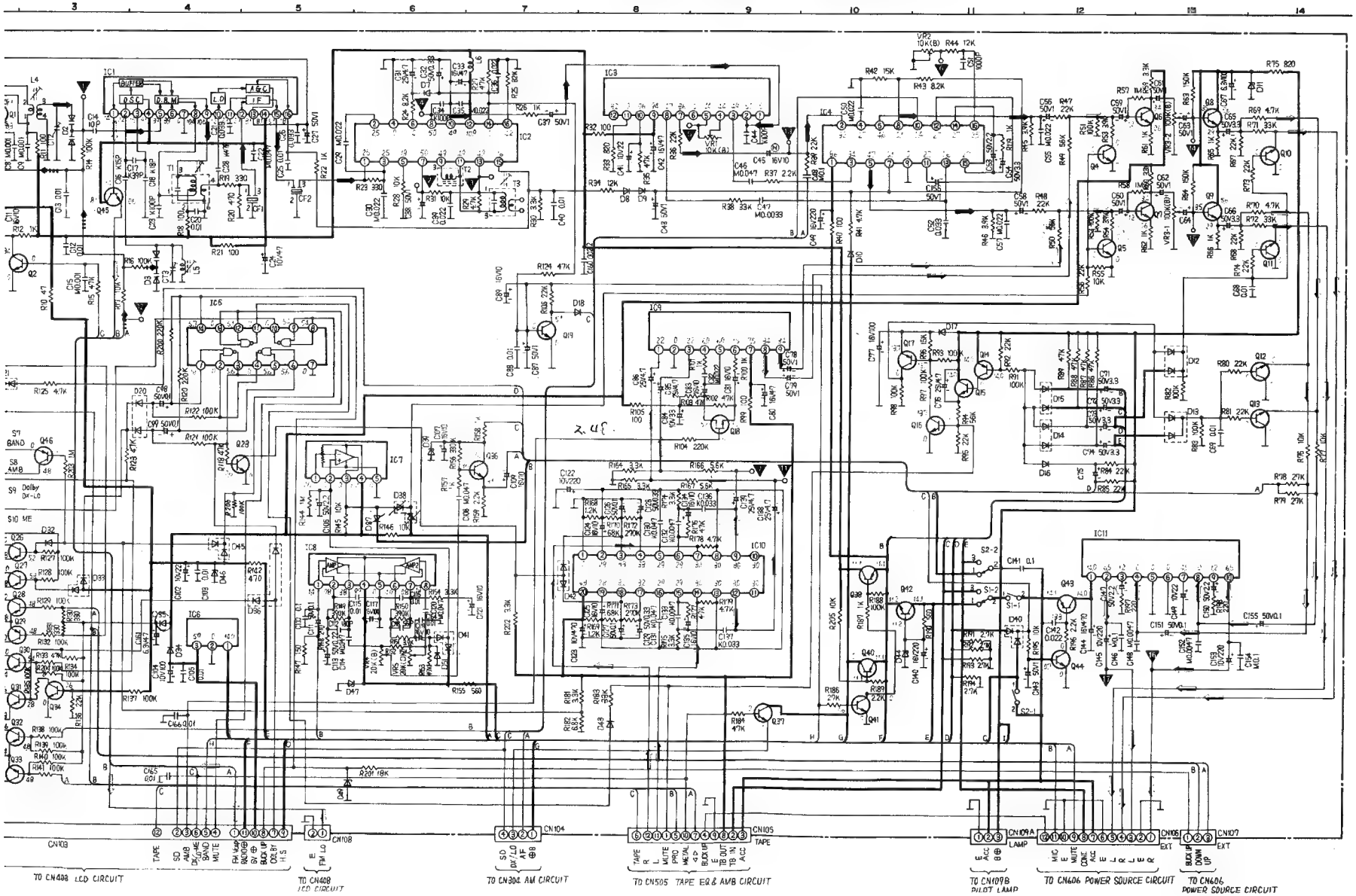


Notes:

1. S1-1: Power switch in "OFF" position.
2. S1-2: Radio/Tape switch in "RADIO" position. (1...RADIO, 3...TAPE)
3. S2-1: Intercom switch "OFF" position.
4. S2-2: Speaker/Headset switch in "Headset" position. (1...Headset, 3...Speaker)
5. S3: Preset ch 1/program switch.
6. S4: Preset ch 2 switch.
7. S5: Preset ch 3 switch.
8. S6: Preset ch 4 switch.
9. S7: Band switch in "FM" position.
10. S8: Ambience switch in "OFF" position.
11. S9: Dolby/Sensitivity switch.
12. S10: Memory/Metal switch.
13. DC Voltage measurements are taken with electronic voltmeter from negative voltage line.
    • FM position.
14. VR1: Separation adjustment VR.
    VR2: Pilot VCO adjustment VR.
    VR3: Volume control VR.
    VR4: Intercom control VR.
    VR5: Muting level control VR.

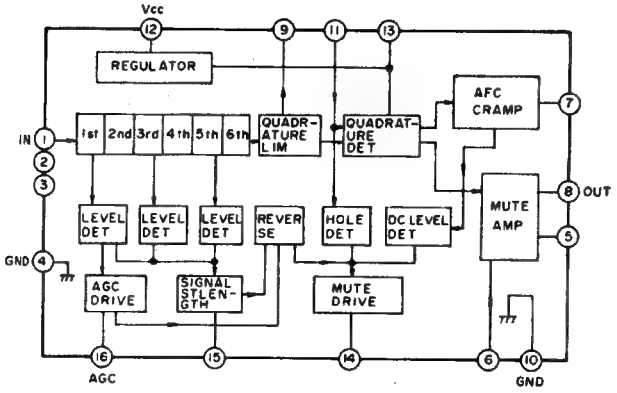
FM Signal
FM Vcap Control Signal
FM OSC Signal
AM Vcap Control Signal
AM OSC Signal
Tape & AF Signal
+ Voltage Line

SCHEMATIC DIAGRAM (MAIN)

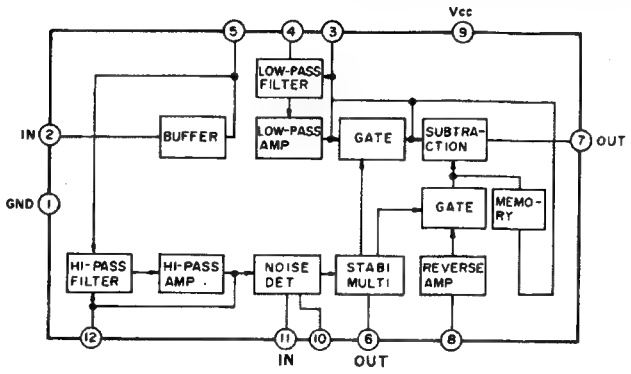


■ IC BLOCK DIAGRAM

IC2 RVILA1140



IC3 RVISTK2110D



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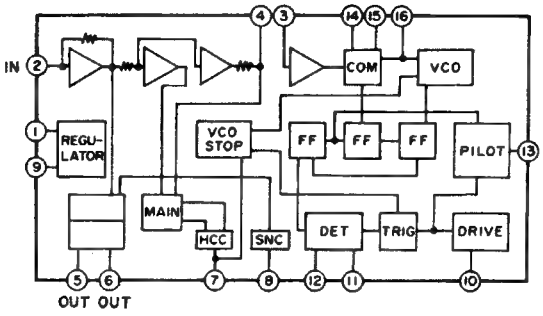
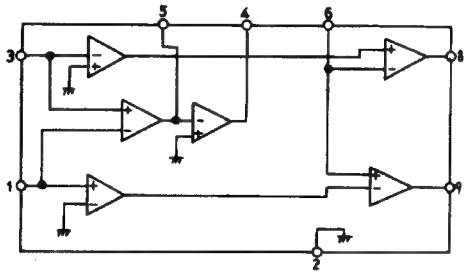
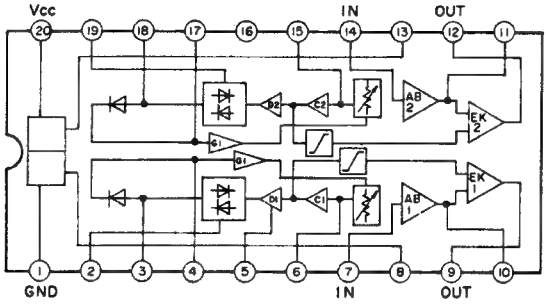


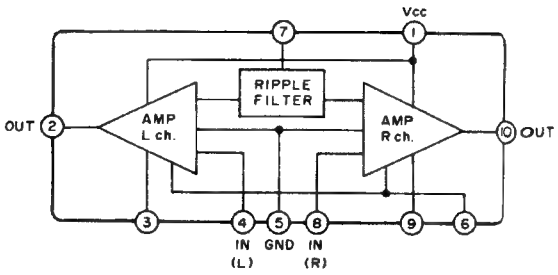
IC9 RVIBA6133



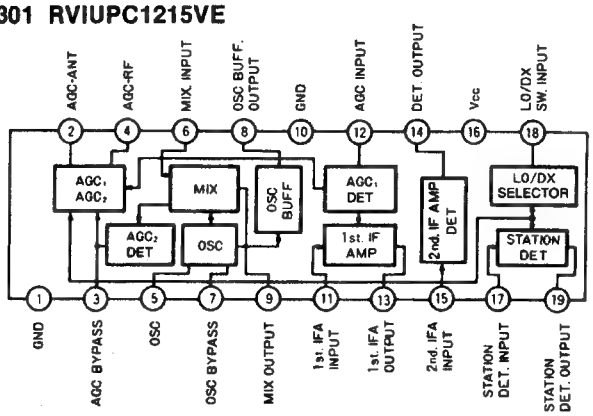
IC10 RVILM1131C



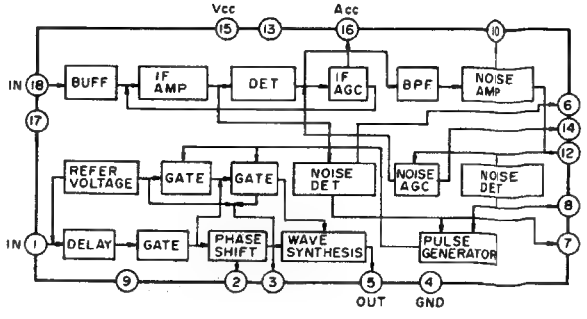
IC11 RVITA7230P



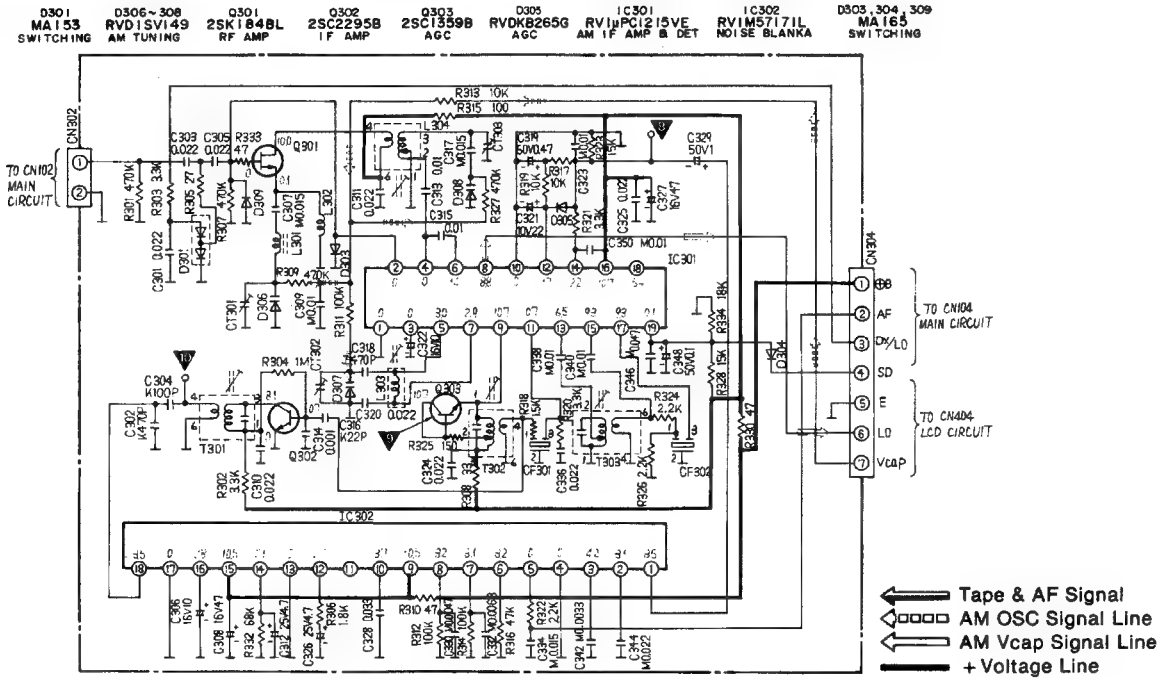
IC301 RVIUPC1215VE



IC302 RVIM5717IL

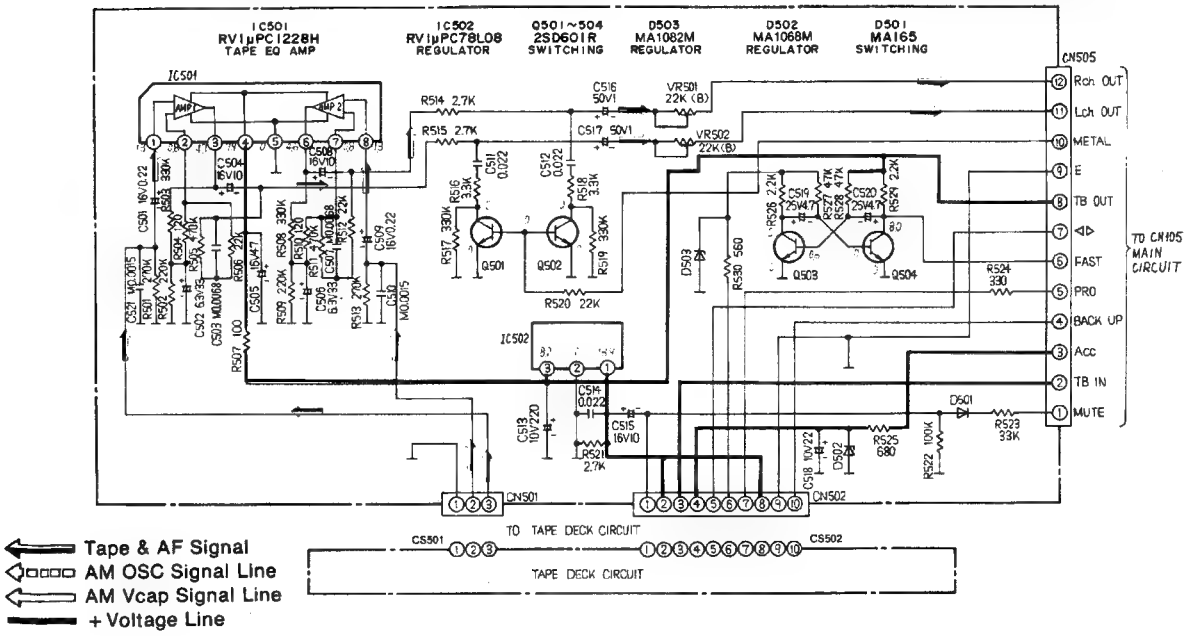


SCHEMATIC DIAGRAM (AM)



Note:
DC voltage measurements are taken with electronic voltmeter from negative voltage line.
• AM position.

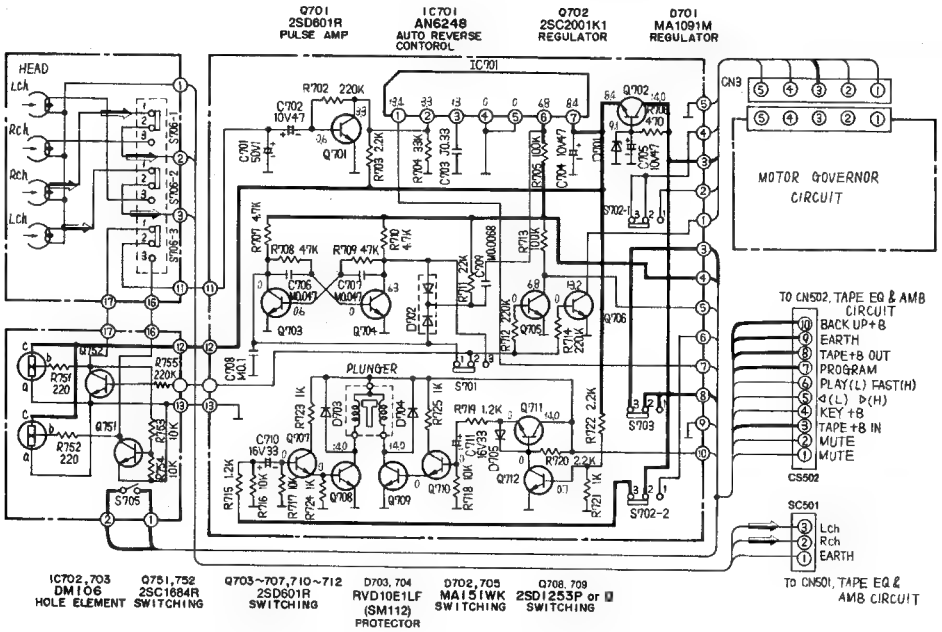
SCHEMATIC DIAGRAM (TAPE EQ & AMBIENCE)



Note:
DC voltage measurements are taken with electronic voltmeter from negative voltage line.
• AM position.

VR501: Dolby level (R) adjustment VR.
VR502: Dolby level (L) adjustment VR.

SCHEMATIC DIAGRAM (TAPE DECK)

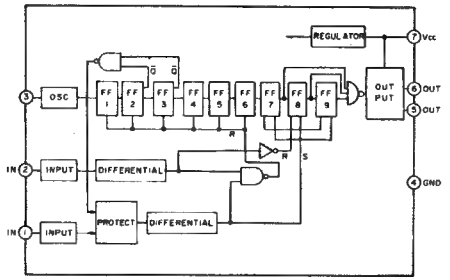


Notes:

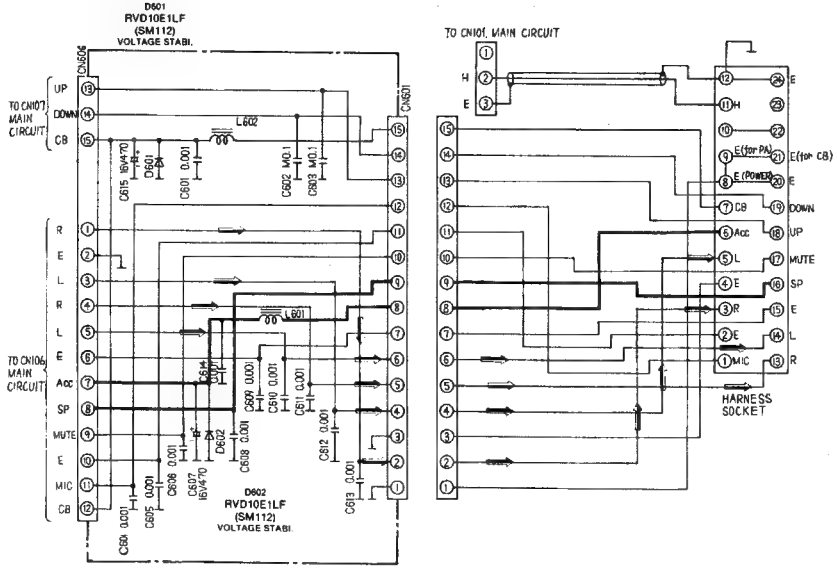
1. S701: Forward/Reverse switch in "Forward" position. (1...Forward, 3...Reverse)
2. S702-1: Motor speed switch in "FAST" position. (1...FAST, 3...PLAY)
3. S702-2: Plunger switch in "ON" position. (1...ON, 3...OFF)
4. S703: Tape switch in "ON" position. (1...OFF, 3...ON)
4. S705: Mute switch.
5. S706-1, S706-2: Head switch.
6. S706-3: Hole Element switch.
7. DC voltage measurements are taken with electronic voltmeter from negative voltage line.
   • Tape position.

⟸ Tape & AF Signal
—— +Voltage Line

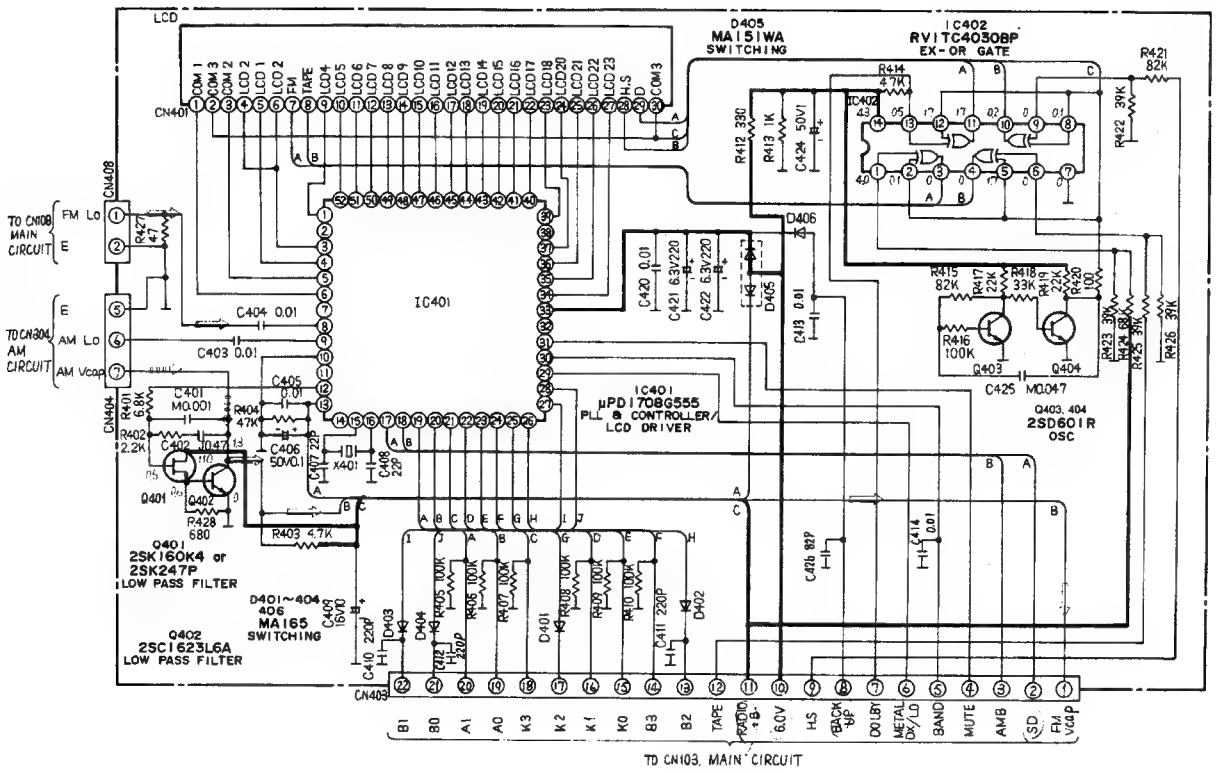
IC701 AN6248



SCHEMATIC DIAGRAM (POWER SOURCE)

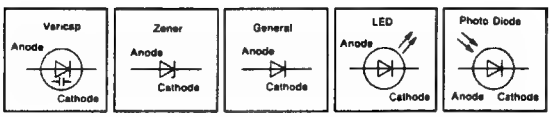


SCHEMATIC DIAGRAM (LCD)

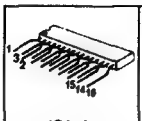
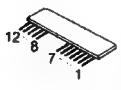
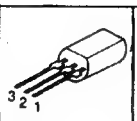
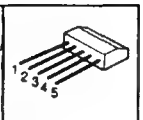
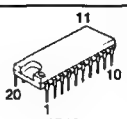
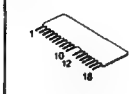
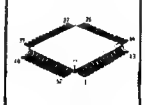
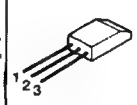
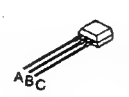
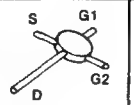
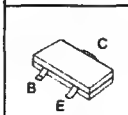
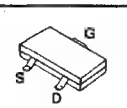
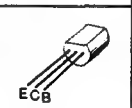
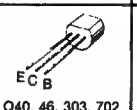
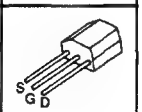
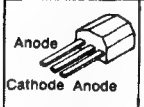
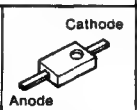
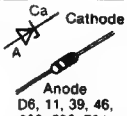
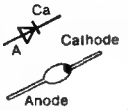
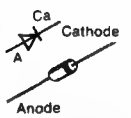
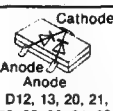
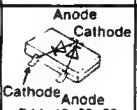
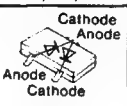
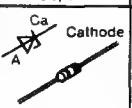
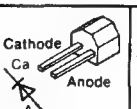
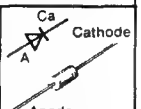


Note:
DC voltage measurements are taken with electronics voltmeter from negative voltage line.
- FM/Local/Headset position.

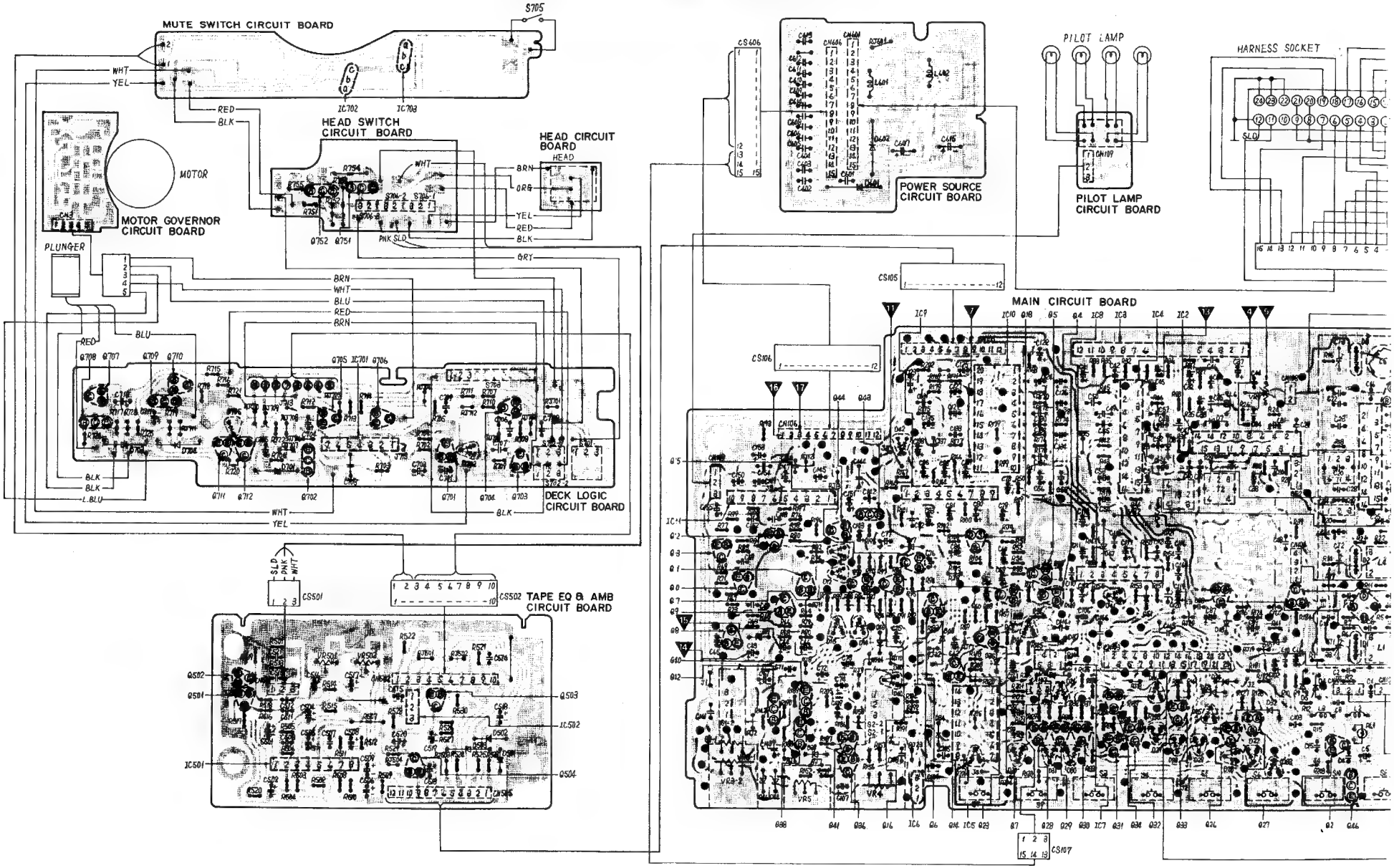
FM OSC Signal
AM Vcap Control Signal
AM OSC Signal
+ Voltage Line



TERMINATIONS

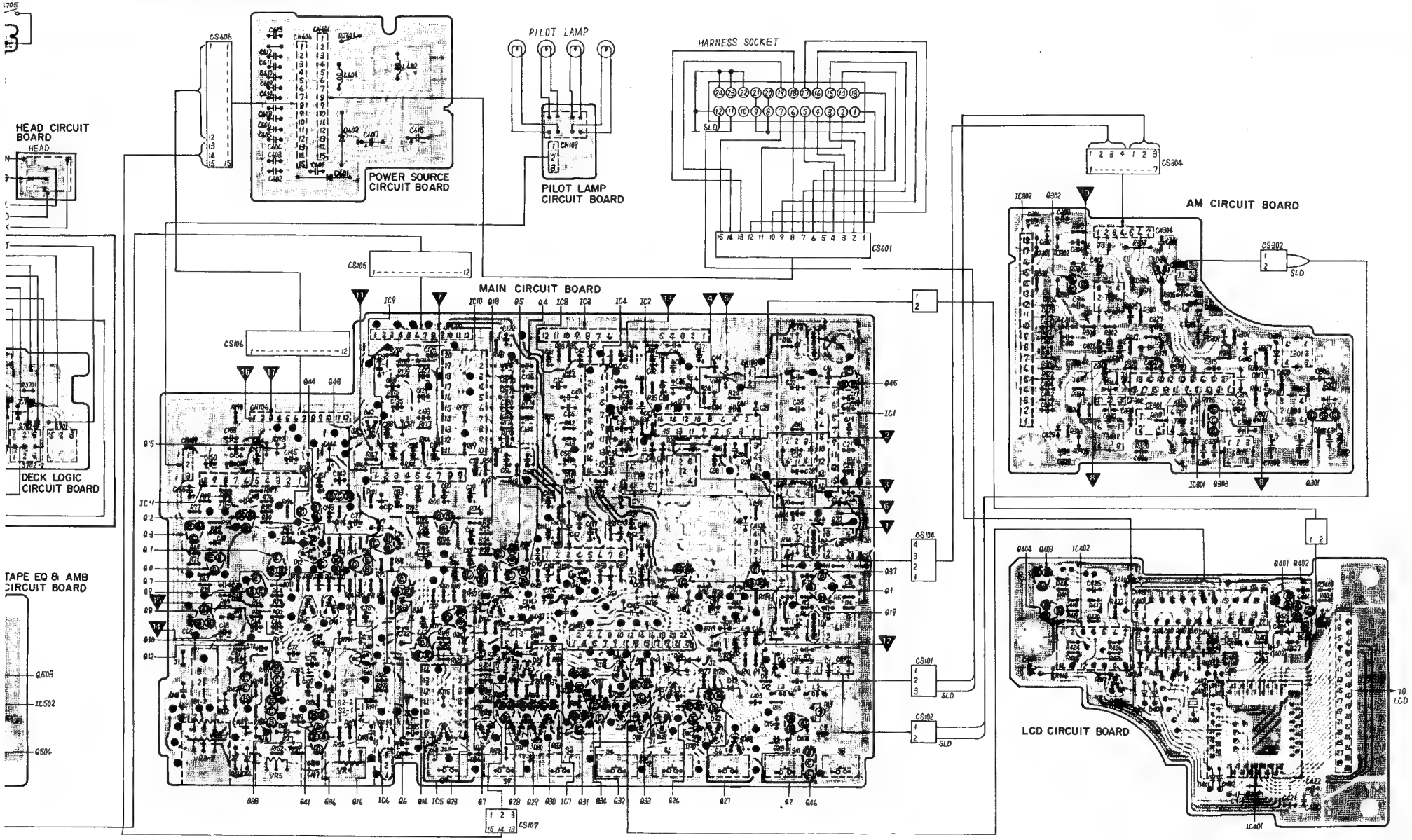
 IC1, 4	 IC2	 IC3	 IC51, 402	 IC6	 IC7
 IC8, 501	 IC9	 IC10	 IC11	 IC301	 IC302
 IC401	 IC502	 IC701	 IC702, 703	 Q1	
 Q2, 4~17.19, 23, 26~34, 36, 37, 41, 44, 45, 302, 402~404, 501~504, 701, 703~707, 710~712		 Q18, 401	 Q38, 42, 43	 Q40, 46, 303, 702, 708, 709, 751, 752	 Q301
 D1~3	 D4, 5	 D6, 11, 39, 46, 502, 503, 701	 D8, 305	 D7, 9, 10, 16~18, 24, 32, 34, 35, 37, 43, 49, 50, 51, 74, 303, 304, 309, 401~404, 406, 501	
 D12, 13, 20, 21, 23, 25, 30, 31, 38, 40, 45, 702, 705	 D14, 15, 33, 36, 42, 405	 D22, 27, 28, 29, 41, 301	 D44, 47	 D306~308	 D601, 602

CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM



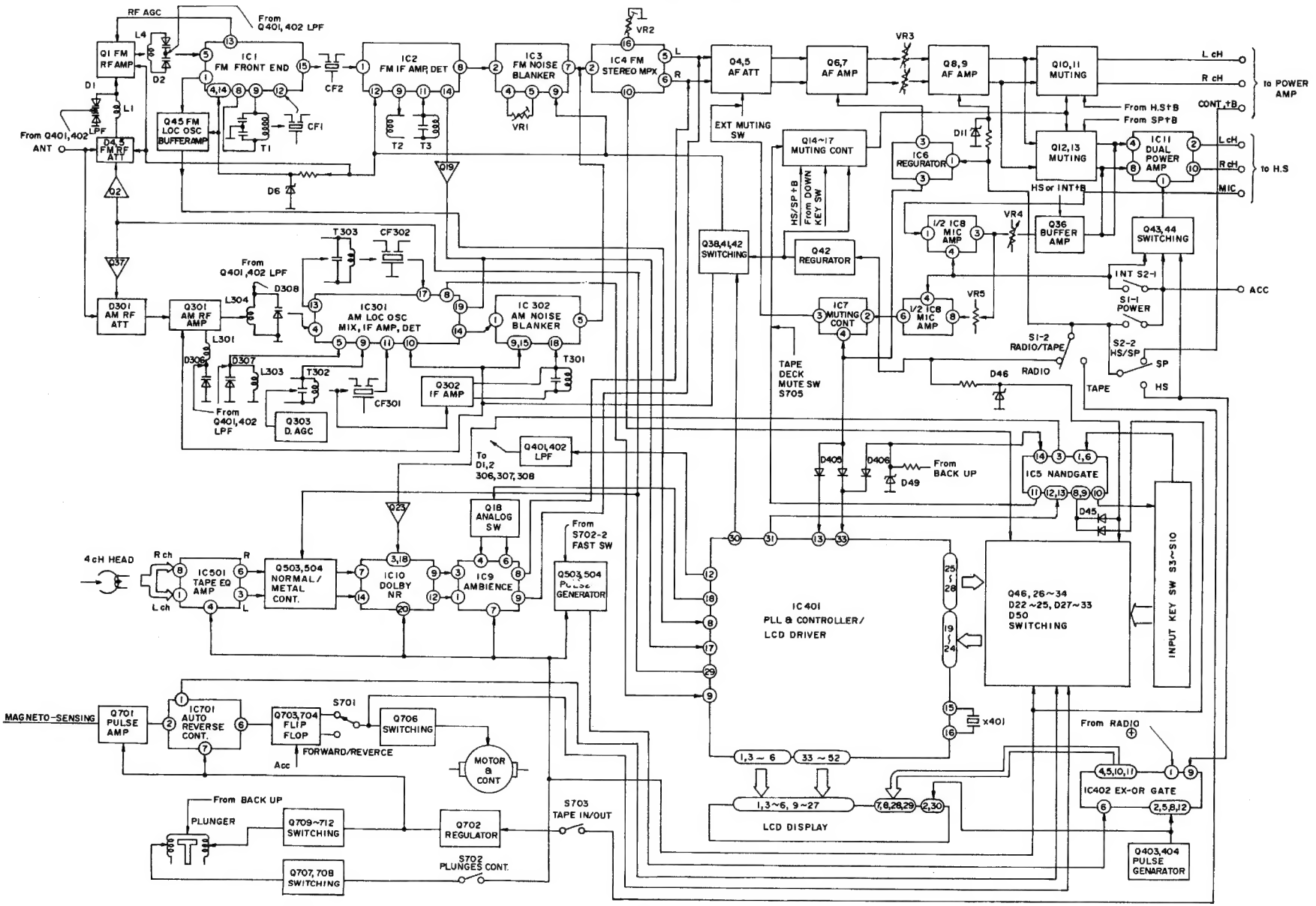
RM-1300A/RM-1400A

CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM

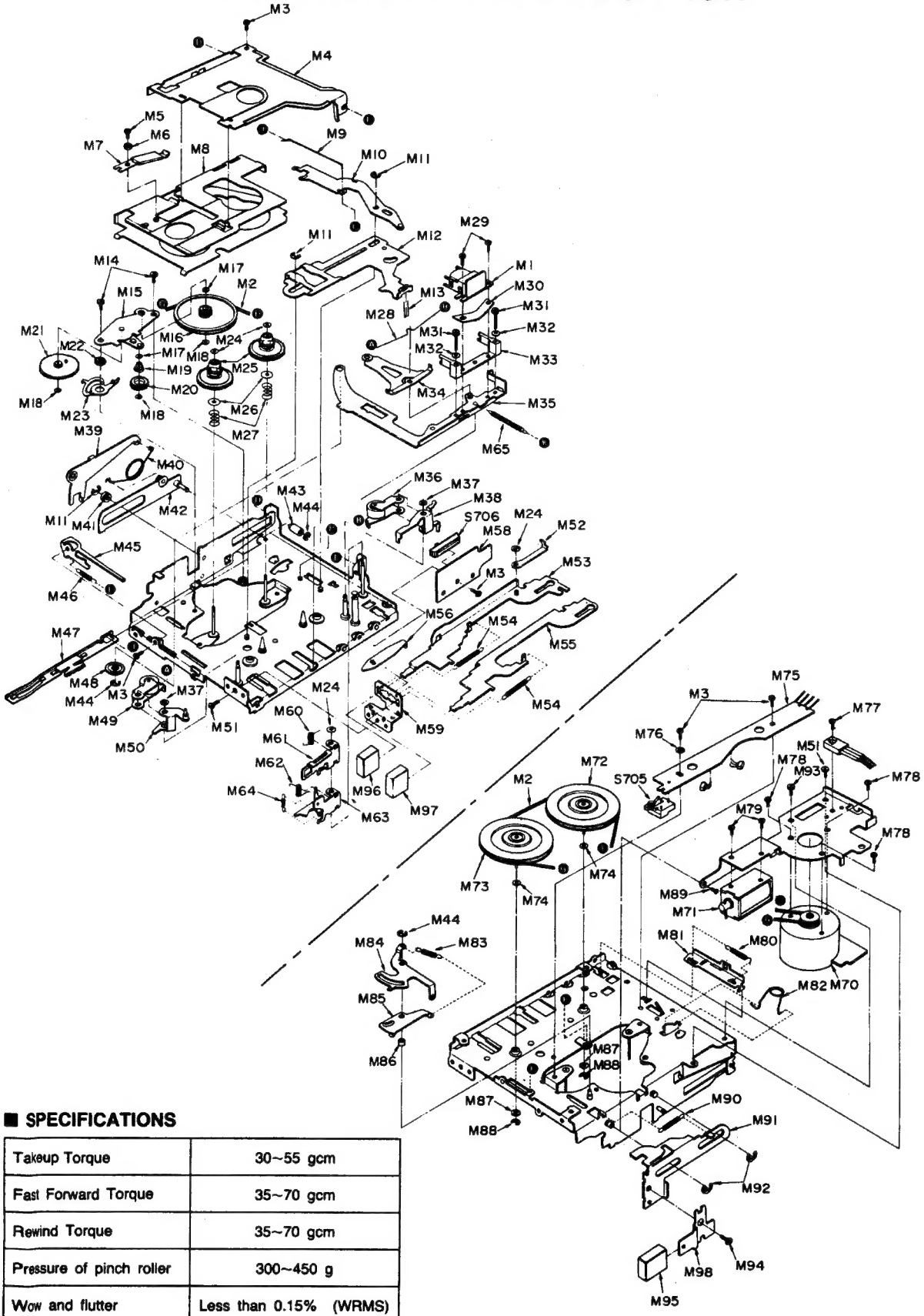


RM-1300A/RM-1400A

BLOCK DIAGRAM



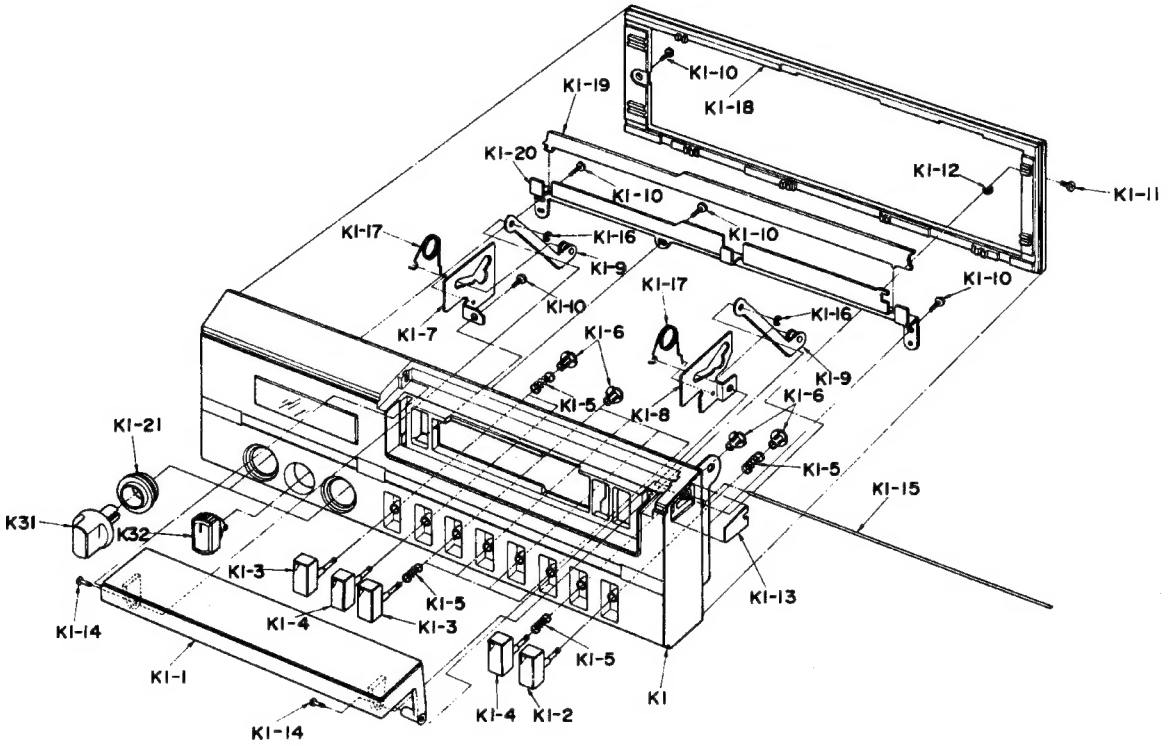
MECHANISM PARTS LOCATION

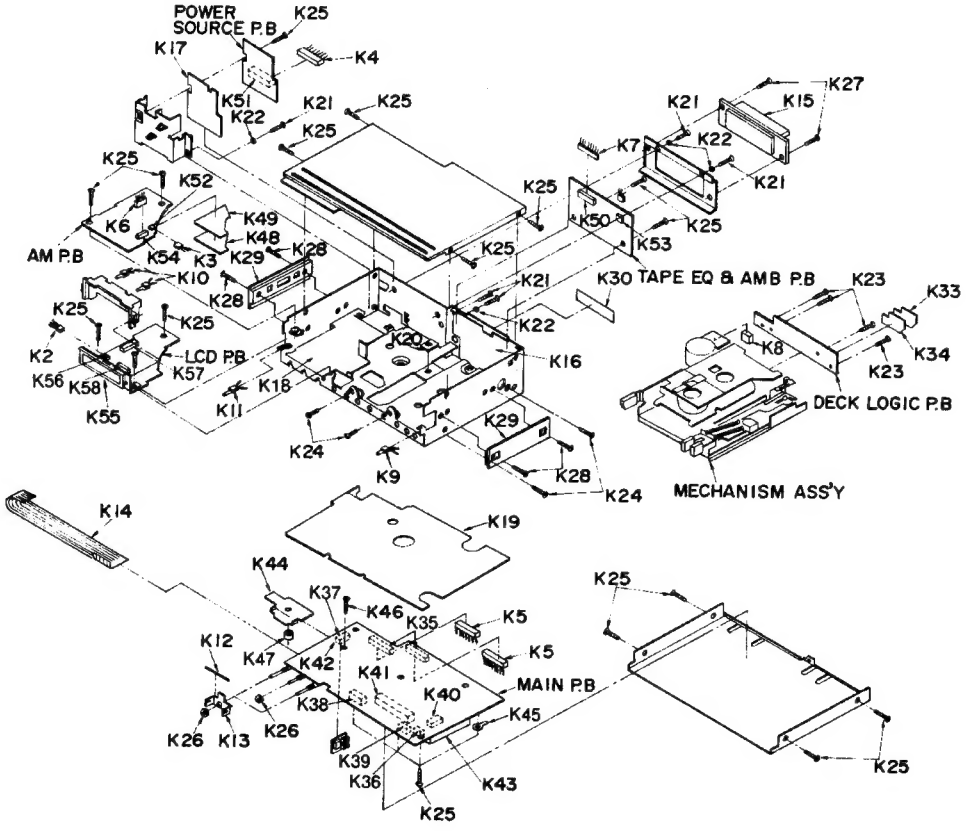


■ SPECIFICATIONS

Takeup Torque	30~55 gcm
Fast Forward Torque	35~70 gcm
Rewind Torque	35~70 gcm
Pressure of pinch roller	300~450 g
Wow and flutter	Less than 0.15% (WRMS)

CABINET PARTS LOCATION





REPLACEMENT PARTS LIST

Ref. No.	Part No.	Part Name & Description
	MECHANICAL PARTS	
M 1	RFH6Z	Playback Head Ass'y
M 2	RFB30Z	Main Belt
M 3	RFE109Z	Screw, Case Lifter etc. M'tg
M 4	RFD153Z	Case Lifter
M 5	RFE90Z	Screw, Pack Presure Spring M'tg
M 6	RFX77Z	Spacer, Pack Presure Spring
M 7	RFS306Z	Spring, Pack Presure
M 8	RFD152Z	Cassette Case B
M 9	RFS298Z	Tension Spring
M 10	RFY239Z	Change Lever
M 11	XUC2FT	E Ring, Main Plate, etc. M'tg
M 12	RFU19Z	Main Plate
M 13	RFS296Z	Spring, Switch Operation Plate
M 14	RFE110Z	Screw, Gear Plate A M'tg
M 15	RFD150Z	Gear Plate A
M 16	RFG40Z	Main Gear
M 17	RFN87Z	Nylon Washer, FF/REW Gear
M 18	SMQ4930	Washer
M 19	RFS299Z	Spring, FF/REW Gear
M 20	RFG42Z	FF/REW Gear
M 21	RFG41Z	Reverse Gear
M 22	RFX74Z	Spacer, Gear Plate
M 23	RFY241Z	Reed Plate
M 24	SMQ4928	Washer, Reel Table
M 25	RFJ26Z	Reel Table
M 26	RFN86Z	Nylon Washer, Reel Table
M 27	RFS309Z	Spring, Reel Table
M 28	RFS295Z	Spring, Pinch Roller Arm Ass'y
M 29	XSN2+4	Screw, Playback Head M'tg
M 30	RFS293Z	Plate Spring, Playback Head
M 31	XYN2+11F	Screw, Tape Guide M'tg
M 32	RFN89Z	Washer, Tape Guide M'tg
M 33	RFE107Z	Tape Guide
M 34	RFY237Z	Pinch Roller Operation Plate Ass'y
M 35	RFU18Z	Head Plate Ass'y
M 36	RFR12Z	Pinch Roller Arm (Right)
M 37	RFN51Z	Washer
M 38	RFY242Z	Switch Lever Arm
M 39	RFY253Z	Lift Up Lever
M 40	RFS307Z	Reverse Spring, Eject
M 41	RFX75Z	Spacer, Push Plate
M 42	RFY250Z	Push Plate
M 43	RFX76Z	Spacer, Push Plate
M 44	XUC15FT	E Ring, Push Plate Spacer
M 45	RFY238Z	Timing Plate
M 46	RFS294Z	Spring, Timing Plate
M 47	RFY240Z	Rack Plate
M 48	RFQ22Z	Head Base Plate Roller
M 49	RFR13Z	Pinch Roller Arm (Left)
M 50	RFY243Z	Pull Plate
M 51	RFE111Z	Screw, Lever Bracket, etc. M'tg
M 52	RFY249Z	Lock Sensor Push Plate
M 53	RFY245Z	Rewind Lever
M 54	RFS300Z	Spring, Rewind, FF Lever
M 55	RFY244Z	FF Lever
M 56	RFY246Z	Non-Lock Plate
M 58	RFT7Z	Circuit Board
M 59	RFD151Z	Bracket, Lever
M 60	RFS303Z	Spring, Lock Plate
M 61	RFY248Z	FF/REW Rock Plate
M 62	RFS302Z	Spring, Lock Release Plate
M 63	RFY247Z	Lock Release Plate
M 64	RFS301Z	Spring, Lock Release Plate
M 65	RFS346Z	Spring, Head Panel Ass'y
M 70	MMX4H2WDA	Motor Ass'y
M 71	RSE99Z	Key Off Plunger
M 72	RFF19Z	Flywheel Ass'y
M 73	RFF18Z	Flywheel Ass'y
M 74	RFN85Z	Nylon Washer, Flywheel Ass'y
M 75	RFT6Z	Circuit Board
M 76	RFN72Z	Washer, Circuit Board
M 77	RFE112Z	Screw, Transistor M'tg
M 78	RFE113Z	Screw, Motor Ass'y M'tg
M 79	RFE91Z	Screw, Key Off Plunger M'tg
M 80	RFS305Z	Spring, Switch Lever Arm
M 81	RFY252Z	Switch Lever Arm
M 82	RFS297Z	Reverse Spring, Change Plate
M 83	RFS308Z	Spring, Key Off Plate B
M 84	RFY255Z	Key Off Plate B
M 85	RFY254Z	Key Off Plate A
M 86	RFX78Z	Spacer, Key Off
M 87	RFN88Z	Nylon Washer, Flywheel Ass'y
M 88	RFE114Z	E Ring, Flywheel Ass'y M'tg
M 89	RFE108Z	Screw, Motor Bracket M'tg
M 90	RFS304Z	Spring, Eject Lever
M 91	RFY251Z	Lever, Eject
M 92	XUC3FT	E Ring, Eject Lever M'tg
M 93	XTN26+4H	Screw, Motor Bracket M'tg
M 94	XYN26+J5	Screw, Lever M'tg
M 95	RBC483Y	Button, Eject
M 96	RBC482Y	Button, REW
M 97	RBC482Z	Button, FF
M 98	RUB284Z	Lever, Eject
	CABINET PARTS	
K 1	RYPM1300AJHD	Front Panel Ass'y (For RM-1300A)
K 1	RYPM1400AJHD	Front Panel Ass'y (For RM-1400A)
K 1-1	RYQM1300AJHD	Cassette Cover Ass'y
K 1-2	RBC481Z	Button, AMB (For RM-1300A)
K 1-2	RBC638Z	Button, AMB (For RM-1400A)
K 1-3	RBC481Z1	Button, Preset, Band (For RM-1300A)
K 1-3	RBC638Z1	Button, Preset, Band (For RM-1400A)
K 1-4	RBC481Z2	Button, M/ME, Dolby, SENS (For RM-1300A)
K 1-4	RBC638Z2	Button, M/ME, Dolby, SENS (For RM-1400A)
K 1-5	RDS3094Z	Spring, Preset Button
K 1-6	RHR475Z	Stopper, Button
K 1-7	RUL697Z	Bracket, Cassette Cover, Left
K 1-8	RUL698Z	Bracket, Cassette Cover, Right
K 1-9	RUL9004Z	Lever, Cassette Cover
K 1-10	XTN26+8B	Tapping Screw
K 1-11	XSN3+6S	Screw, Cassette Cover Bracket
K 1-12	XWA3B	Washer
K 1-13	RGX1367Z	Ornament
K 1-14	RHM164Z	Shaft, Cassette Cover
K 1-15	RDF828Z	Shaft, Cassette Cover
K 1-16	XUC12F	Stop Ring
K 1-17	RUS515Z	Spring, Cassette Cover
K 1-18	RHG9000Z	Rubber, Front Panel
K 1-19	RGE74Z	Panel, Indicator
K 1-20	RUH5YA	Angle, Indicator
K 1-21	RHG3001Z	Rubber, Knob
K 2	RWN1M1300AJH	Socket Ass'y, CN 108, 408
K 3	RWN2M1300AJM	Socket Ass'y, CN 102, 302
K 4	RWN3M1300AJH	Socket Ass'y, CN 106, 107, 606
K 5	RWN4M1300AJH	Socket Ass'y, CN 105, 505
K 6	RWN5M1300AJH	Socket Ass'y, CN 104, 304, 404
K 7	RWN6M1300AJH	Socket Ass'y, CN 502
K 8	RWN7M1300AJH	Socket Ass'y (Tape. Motor)
K 9	RWN8M1300AJH	Socket/Lamp Ass'y (PL 4)
K 10	RWN9M1300AJH	Socket/Lamp Ass'y (PL 1, 5)
K 11	RWN10M1300AJ	Socket/Lamp Ass'y (PL 2)
K 12	RUS542Z	Spring, Volume
K 13	RMD2056Z	Bracket
K 14	RJE161Z	Lead Wire
K 15	RJS0R1Z	Socket
K 16	RMX248Z	Insulator
K 17	RMX249Z	Insulator
K 18	RMX250Y	Insulator
K 19	RMX252Y	Insulator
K 20	RMX256Z	Insulator
K 21	XSN3+4S	Screw, Bracket, Socket M'tg
K 22	XWA3B	Washer
K 23	XTN2+4B	Screw, Circuit Board M'tg
K 24	XTV26+5F	Screw, Deck M'tg
K 25	XTV3+6BFN	Screw, Bracket, Circuit Board M'tg
K 26	XNS7D	Nut Volume Mute Int Cum
K 27	RHE5047Z	Screw, Socket M'tg
K 28	RHE5048Z	Screw, Slider M'tg
K 29	RKC80Z	Slider
K 30	RGT1160Z	Name Plate (For RM-1300A)
K 30	RGT1167Z	Name Plate (For RM-1400A)
K 31	RBN651Y	Knob, VOLUME, INT COM (For RM-1300A)
K 31	RBN702Z	Knob, VOLUME, INT COM (For RM-1400A)
K 32	RYTM1100NHD	Mute Knob Ass'y
K 33	RMC910Z	Shield Cover
K 34	RMX260Z	Insulator
K 35	RJP12G10Z	Plug, CN 105, 106
K 36	RJP2G4Y	Plug, CN 102, 108
K 37	RJP3G1Z	Plug, CN 109
K 38	RJP3G10Z	Plug, CN 107
K 39	RJP3G4Y	Plug, CN 101
K 40	RJP4G10Z	Plug, CN 104
K 41	RJS236Q8Z	Plug, CN 103
K 42	RJS3M1Z	Plug, CN 109
K 43	RMC805Z	Shield
K 44	RMY188Z	Heat Sink
K 45	RJT1026Z	Terminal
K 46	XTB3+8BFZ	Screw, Heat Sink M'tg
K 47	RHM168Z	Spacer, Heat Sink
K 48	RMC1026Z	Shield
K 49	RMX301Z	Insulator
K 50	RJP10G9Y	Plug, CN 502
K 51	RJP15G10Z	Plug, CN 601
K 52	RJP2G9YA	Plug, CN 302
K 53	RJP3G9YA	Plug, CN 501
K 54	RJP7G10Z	Plug, CN 304
K 55	RADAM834	Display Tube
K 56	RJP2G9Y	Plug (2P), CN 408
K 57	RJS22Q7Z	Socket, CN 403
K 58	RJS30Q5Z	Socket, CN 401

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